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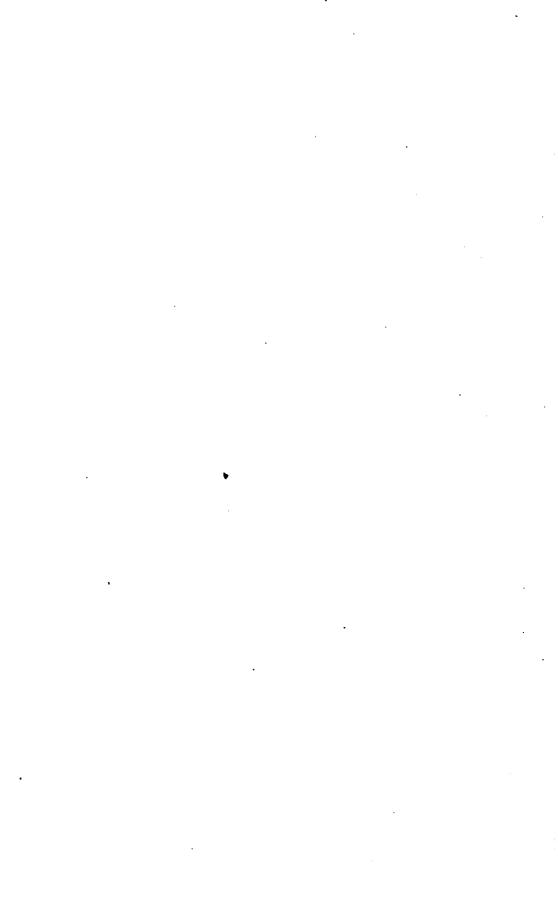


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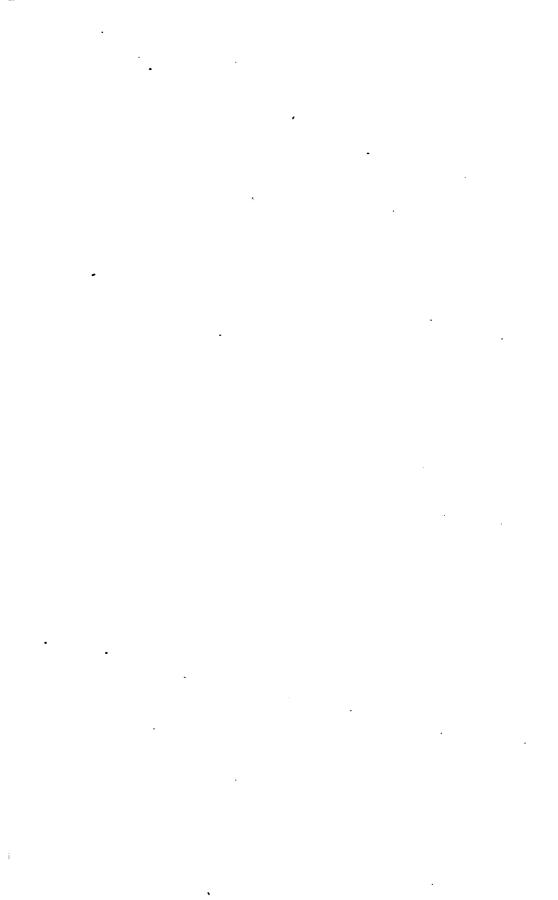
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Original Communications.

SOME REMARKS UPON EMBOLUS OF THE RETINAL ARTERY AND ITS BRANCHES.

By John Dunn, M. D., Richmoud, Va.

OR our purposes tonight the retinal artery may be considered to consist of three divisions, in any one of which an embolus may elect to stake its claim for our considera-These three divisions are, first, the central stem from its point of origin at the ophthalmic artery to its bifurcation in the region of the optic papilla, second, the larger branches as they are to be seen with the ophthalmoscope in the inner layers of the retina, third, the minute branches, offshoots of the above, which are either invisible or to be seen only under the most careful focussing with the ophthalmoscopic lens. It has been my good fortune to have had within the past few months a case with embolus in each one of the above mentioned three divisions of the retinal artery, and as these patients were all seen shortly after the embolization took place and were willing to submit to examination of their eyes as often as I suggested, I have been able to watch and note varying appearances in the fundus in a rather exceptional way.

Case 1, was W. A., aged 54, who, just after taking a hot bath, became suddeuly and totally blind in his right eye. About two years previously the gentleman had had an attack of left side paralysis, from the effects of which he had, however, in a great measure recovered. Physical examination revealed a moderately dilated heart, with an intermittent aortic murmer. In this

case I had the opportunity of examining the affected eyes within two hours after the blindness came on.

Case e, was that of W. J., aged 23, who suddenly, while reading a newspaper, lost the sight of his right eye. This case came under observation a few days after the closure of the retinal vessel. Physical examination revealed only marked anæmia. No heart lesion was discoverable.

Case 3, was that of Mrs. A., aged 54, who consulted me for recent attacks of vertigo, immediately following one of which an ocular examination was made. In this case there was extensive aortic valvular disease.

In the first case the embolus was located in the central artery, in the second, in one of the branches of the inferior temporal retinal artery, in the third in several of the minute branches in various parts of the fundus. In the first case the sight was permanently and entirely lost, in the second, it was restored almost to normal; in the third, the vision was at no time demonstrably affected.

If we bear in mind that the retinal artery is an end artery, i, e., it has no anastomosis either with the other arteries supplying the eye-ball or among its own branches, and that after it enters the retina its subdivisions are visible to the naked eye, we can readily understand that complete embolization of the main stemor any one of its branches means the shutting off of the arterial blood supply of the whele retina or of the part supplied by the embolized branch and further, that these are visible. In Case 1, where we had to do with an almost complete embolization of the main stem, there was present in the central part of the fundus, two hours after the embolus reached the artery, a faint cedema, which in the next few days spread, save for a small area, over the whole back-ground of the eye, giving instead of the normal pinkish red color, a cloudy, whitish appearance to to the fundus. This cloudy appearance as we would expect, varies in extent with the size and importance of the artery oc-The length of time this ædema lasts varies in different cases. In Case 1 it lasted about four weeks, in Case 2, about two months. Over the whole region of the macula in Case 1, there was to be seen after the first few hours a round spot, cherry red in color, occupying the whole of the region of the macula, in a strong contrast with the surrounding cloudiness.

A red spot is frequently seen at the fovea in embolus of the central artery and was for some time thought to be a hemor

rhage. Careful observation of its manner of formation, however, has proven that this is not the case. The red color being due to the fact that the retina at the macula is thinner than elsewhere, and has no blood vessels. As a consequence, the cedema of its tissues is less and thus the color of the choroid appears abnormally red by contrast with the cloudiness of the surrounding ædematous retina. In Case 1 the formation of the cherry spot, the changes from day to day and its final disappearance were all carefully noted, and while in this case its color was one due to contrast, it cannot be said that this is always the case, for, from other causes, hemorrhagic infiltration, confined accurately to the the macula, does occur, and gives a picture, save for a greater intensity of the redness, very similar to the cherry macula of embolus. Nor, although this color be in main the result of contrast, does the macula region always remain on its disappearance free from ophthalmoscopically visible changes, which go to prove this, where they occur, that profound alterations have taken place.

The visible changes in the vessels are too numerous for us to do more than mention here the most important. They exhibit themselves in two ways; first, in developing visible movements of the contained blood; second, in the appearances of the vessels as a whole. Where the embolus completely fills the lumen of the vessels no movement in the blood beyond the seat of the embolus is possible; but where the embolization is incomplete the movements first referred to may become visible. In Case 1, no less than four different kinds of movement were observed in the blood in the retinal vessels. On the first day a sagging backwards and forwards motion was visible, chiefly confined to the veins, whose walls as well as the contents of the vessels took part in the movement. A day or two later a faint pulsatile movement was visible in the arteries of the disc. Later still in one artery there was visible a continuous centrifugal flow of its contained blood current; the following visit this phenomenon was no longer present, but in an adjoining vein could be seen a distinct centripetal continuous current. More than one observer has witnessed the apparently paradoxical in a centripetal current in one of the small retinal arteries. The vessels themselves, both veins and arteries, may appear much contracted,

DUNN-EMBOLUS OF THE RETINAL ARTERY AND ITS BRANCHES.

with irregular outlines, or as mere threads in the fundus; one or more may appear as short segmented columns of blood connected by a faintly visible whitish thread, they may be to the eye for a shorter or longer distance mere threads where they will suddenly regain their full or nearly full size. That this later fact is so brings up some interesting points which, however, must be here omitted. When the embolus is large but incompletely blocks the lumen of the main artery as in Case, the appearance of the vessels change from day to day; an almost empty artery today may tomorrow have regained almost its normal size and vice versa. Later in the history of the cases where the embolization is and remains complete the vessel or vessels thus blocked gradually atrophy and become mere threads. We must bear in mind always that the various details of the picture vary with the location of the embolus and whether it completely or only partially blocks the lumen of the vessel it is obstructing. Following upon the closure of the central artery by an embolus the fundus shows two other features upon which we may dwell for an instant; one is retinal hemorrhage, the other atrophy of the nerve about the papilla. Hemorrhages into the retina do occur, but not always. After embolus in the central artery the hemorrhage or hemorrhages are usually found in the neighborhood of the outer side of the disc. That retinal hemorrhages are not more common after embolus is to be wondered at. When they do occur their presence is at times possibly due to minute particles of the original embolus breaking off and being carried further in into the very small arteries, where they cause rupture of the vessel walls. Hemorrhage is the only visible evidence of the presence of an embolus in such cases as that of Mrs. A., above mentioned.

That in Case No. 1, of embolus of the central artery, there resulted invisible atrophy of the papilla seems to show that this portion of the optic nerve fibers derives its blood supply from capillary branches coming either from the central artery or from its offshoots and that it is not supplied with blood collaterally through anastomosis with the choroidal vessels from the branches supplied to the sheath of the nerve. It sometimes happens that in cases of embolus of the central artery the sight of the affected eye is lost save for the macula and the region between

it and the disc. Some observers claim that to explain this we must admit the existence of an anomalous cilo retinal vessel, supplying the portion of the retina which has preserved its functions. In these cases there can generally be seen an anomalous branch coming into view at the edge of the disc and directed toward the macular region. When, however, we consider the great variety in manner and location of subdivision of the retinal arteries, it seems most likely that this so called cilo-retinal artery is only an anomalous offshoot from the central retinal artery and one whose point of origin is behind the situation of the embolus and consequently one whose circulation is not affected by the plugging of the main artery further on.

In the first short while after embolization of the central artery or of one or more of its main branches takes place, the picture presented by the fundus is as a rule, sufficiently characteristic for us to recognize the nature of the trouble. In some of these cases, however, a history of sudden loss of vision and the pres ence of a heart lesion aiding materially in our diagnosis. cases of long standing, where all history is wanting, while we may suspect a former embolization, and with a varying degree of probability that we are right, there will be no appearances present in the fundus which might not have been due to other Embolus of the central artery, or of one or more of its main branches, has been the subject of many reports. similar to our third one, in which we have to do with simple non-infectoins embolus of the terminal branches, have received only infrequent mention, yet the importance of their recognition in that they lead us to suspect disease of the heart or aorta, or of the large arteries of the base of the brain, even when no other symptoms have called our attention to this possibility, is at once evident. The picture presented by the fundus in this third class of cases is characteristic. That of Mrs. A., may be taken as an example; here in the retina were isolated hemorrhagic spots. few in number and in different stages of absorption, the amount of visible retinal degeneration relative to the size of the hemorrhagic areas, being large, which shows that the disturbance of the nutrition in these areas had been greater than results from simple hemorrhagic extravasation.

Mrs. A. suffers from time to time with sudden, and transient

attacks of vertigo, so severe at times that she must have assistance or she will fall. Accompanying these attacks there are transient sensations of numbness or tingling in one finger or one hand, passing loss of perfect control over one muscle or a group of muscles, the appearance of aphasia in one of its forms. picture in the fundus reveals to us clearly the cause of these symptoms, viz: Embolization of some minute branch of one or another of the cerebral arteries, the embolus being very minute in size and its source being the diseased valves of the heart. What the future holds for this patient is not difficult in a measure Since this article was written, through the kindness of Dr. J. Allison Hodges, I have had the opportunity of seeing a case very similar to that of Mrs. A. In this case, in all likelihood, there was extensive desease of the basilar arteries, whence there are thrown into the circulation of the brain small emboli. Examination of the eyes revealed two, and possibly three, places where there may have been embolization of the smaller arteries of the retina. Unfortunately a partial clonding of the crystalline lenses, together with the mental condition of the patient, prevented anything like a complete examination of the eyes.

We sometimes find in the retina of persons who have had heart disease or atheromatous degeneration of the larger vessels and, who later sometimes have embolization of the retinal artery, small irregularly shaped whitish patches. These, not unlikely, mark the seat of previous emboli of the minute retinal vessels. Two such white patches were visible in the fundus of our first case. Cardiac hypertrophy with valvular disease, as in our third case, and atheroma or aneurism of the larger arteries going to the brain furnish perhaps the larger portion of the cases of embolization of the central artery of the retina and its branches. Cases have been reported as occuring where the only demonstrable lesion was cardiac hypertrophy without valvular disease. Embolus occurs also in Bright's disease, during certain fevers, and in pregnancy. In some cases the source of the embolus cannot be found.

APPENDICITIS—A POSSIBLE CAUSE—THE USE OF THE LIGATURE—IS IT NECESSARY?*

By Wm. T. OPPENHEIMER, M. D., President of City Board of Health, Richmond, Va.

*HE subject for the evening's discussion, as announced in the notices, was appendicitis. I do not wish to take in such a vast subject only to confine myself to the cause, the results of inflammation and certain procedures for relief. I have often been twitted for pressing the theory that so many diseases were due to the accumulation of gas in the intestinal canal. Possibly 50 per cent, of all cases of sickness is due to some irregularity, imprudence or defect of digestion. The question is asked, why do we hear more of appendicitis now than formerly? I would answer that the disease was not so well known, and that possibly as much existed then as now, but under different names, e. g., many cases formerly diagnosed as peritonitis were fulminant appendicitis. But, nevertheless, I claim the disease is more frequent now. Possibly the cause may lie in improper food. Bread is the most common food, and the common baking powder used has caused more and different varieties of indigestion than formerly, probably affecting the digestive juices. I bring this out, although I have no statistics to prove it, for I believe that appendicitis is nothing more than indigestion in the appendix. Authorities on the subject refer to the blood vessels, sex, etc., when naming the causes. I wish to make is that it is the result always of an accumulation of gas; never of plugging of the artery or sloughing. I believe that the capillaries are so numerous that even with blocking of the artery collateral circulation is soon established.

In every case of appendicitis the patient is more or less dyspeptic. It may even be his first attack. The resulting gas accumulating in the cecum, the appendix becomes blown up and its orifice is blocked. In recurrent cases, the orifice may be more and more narrowed with each succeeding attack, until it is finally occluded, the circulation is cut off entirely if the distance is great and sloughing results.

^{*}Read before the Richmond Academy of Medicine and Surgery, May 24, 1898.

In forcing gas into the cecum, the appendix is more distended at its apex than elsewhere, and least at its orifice, because of the presence of circular muscular fibers. Constant pumping in of gas may result in partial closure only, and adhesions may form; but when there is complete closure, the fulminant variety is produced, and, going on, protective abscesses. This statement regarding closure in the fulminating form must be so, because where the appendix is filled with pus, if it were not entirely sealed there would be drainage into the cecum, and it would be To attest my belief in it, I have operated for appendicitis without using the ligature. Of course, in the recurrent form, where the operation is done between the attacks, the ligature should always be applied. The danger from it is that it might not be applied near enough to the cecum, leaving pus which may result in septicemia, peritonitis, etc. It safe hands. the operation is less dangerous without than with the ligature.

The points I have stated are altogether different from those heretofore brought forward, and I would like for the gentlemen present to think of them.

Why do more men than women suffer from appendicits? The reason given by an authority is that in the latter sex the appendicular circulation is reinforced by a branch from the ovarian artery. I contend that it is because the circular muscular fibers around the orifice of the appendix are stronger in the male, the tension is greater, and, therefore, closure is more likely. I do not deny that the circulation in women may supply more blood.

The points brought out have great bearing on the treatment, namely, food. Indigestion of all forms should have the closest attention, for the first seizure may bring on an attack of appendicitis.

TREATMENT OF THE UMBILICAL CORD—WITHOUT LIGATURE.*

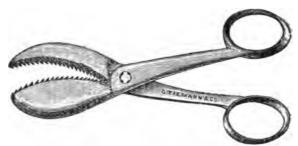
H. S. LOTT, M. D. Salem, N. C.

T is with a degree of reluctance that I present this matter for your consideration, my reason being that it is comparatively new ground, and having just gotten the instrument com-

^{*}Read at 45th Annual Meeting of the North Carolina Medical Society, Charlotte, May 3, 1898.

pleted, favorable opportunities have not offered to test its safety and usefulness. However, at the kind request of its chairman to offer something under this section, I determined to place the thought before you, and to ask you to help in deciding either for or against its utility.

I have long thought that it was unnecessary to tie the umblical cord; and while the thought is comparatively new, it is not altogether untried ground upon which I am treading. Kellar (Pacific Med. Jour .- Jan. 1897) claims that "in over two thousand cases he has cut the cord about two and a half inches from the umbilicus, stripped it, to remove the Whartonian jelley, and left it to dessicate, without ligature or dressing, with good results in all cases, unless the parents were tuberculous or syphilitic." He then goes on to give reasons, some of which are really most excellent; among others citing the fact that ligation is not required at the birth of any other animal, that it is not necessary from the formation of the cord, and the structure of its component vessels; that, being unnatural, it may be injurious, not only in interfering with cleanliness and dessication of the stump, but by maintaining the funicular vessels in a state of congestion and distention from unnaturally retained blood, may interfere with the establishment of the normal circulation in the child, and thus lay the foundation for numerous ills which may start from this cause. And finally holds that cases are cited by the highest authorities in which the life of the child was saved by removing the ligature. To this I would add my observation that in all cases of reported bleeding from the stump, none were correct, and in cases where I have arrived at he patient's house sometimes, maybe, hours after the birth of the child, and the "old lady" had tied and cut the cord, the string used, and the lax manner of its application, would have been very little safeguard against bleeding. the thought that occured to me, was this; a torn, or crushed artery never bleeds; it is this fact which in a great measure guarantees safety in the process of severing the cord in the lower animals; for instance the cow crushes it between her teeth, and a device which will most closely imitate nature's process, will be eht best and safest solution of the problem.



The scissors which I have devised, and which Tiemann & Co. have perfected in their make, are very simple, and are capable, I believe, of accomplishing two ends, viz—doing away with the need of applying a ligature, and also the danger of bleding from patulous end of a smooth cut vessel. In size and appearance this instrument is much like the ordinary umbilical scissors, the difference being in the cutting edges of the blades, the lower of which is convex, the upper one concave, with serrated, or tooth like cutting edges. On the right side of each blade, the side presenting to the umbilicus of the child, is an eighth inch flange, with its compressing surface roughened, that it may hold as well as compress the stump for one eighth inch beyond its mangled end; thus exercising firm hæmostatic pressure, in addition to the prompt agglutination of tissues secured by the oozing serum of the fringed extremity.

The manner of using the scissors that I would suggest is this; always wait until pulsation in the cord has ceased, then seize the cord near to the umbilicus of the child firmly between the thumb and fore finger of the right hand, and with the thumb and fore finger of the left hand strip the cord of its Whartonian jelly, for two or three inches, stripping toward the placental attachment. When this is done, sever the cord with a firm compression of the scissors, about an inch and a half, or two inches, from the umbilius, and hold the divided and mutilated stump between the compressing flanges for one or two minutes; after which, dress in the usual manner with a dry clean cloth, and a firmly applied abdominal bandage.

DISCUSSION.

Dr. Stafford-I had a case last summer which will serve to

illustrate Dr. Lott's statement, I was called hastily to see a negro woman, a cook, who was taken suddenly in labor. seems that she had deceived her employers and made them believe that her time of confinement was very much more remote than actually proved to be the case. When I got there I found the floor a pool of blood, almost, and the woman lying down, flooding furiously, the placenta partially detatched by the fall of the child-the woman had been delivered in the standing I removed the placenta by the introduction of the posture. hand. After I had done so, I noticed on the end of the cord a flap of skin about two inches across, and very ragged. Of course as soon as I could leave her I went to see the child. The denuded surface on the child was much larger than the flap on the cord would seem to indicate, and at first thought I was puzzled to know what to do with it. I made a purse string suture and tied it up, and the child made good recovery. I mention in this connection that there was no hemorrhage from the child at all.

Dr. Burroughs:—I hope that the Society, especially the younger members, will not attempt to follow this practice. The old way is good enough. I am opposed to the plan for the very simple fact that there is two and a half inches of the cord left. It is too much. Two and a half inches left there decomposing from three to five days, perhaps longer, say six or eight days, would create a stench that would render the room in an unsanitary condition and offensive to those around. It is an unsafe proceeding, and while in the majority of cases the cord may not bleed, yet there are instances in which there will be fatal hemorrhage, and I know that we would feel safer to go home and lie down to sleep knowing that we had ligatured the umbilicus, than to go away feeling that we only had it mashed and bruised.

Dr. Hays:—I would like to ask the doctor, in the first place, if in his practice he ties the cord; I should like to ask in the second place, if he advises his brother doctors to leave it untied; I should like to ask in the third place, if tying the cord properly ever does any damage; I should like to ask in the fourth place, if he would not lose a patient occasionally from leaving the cord untied; and most important of all, I should like to know in the fifth place if he does lose a patient from leaving the cord untied, that might have been saved by it, what excuse has he to offer to the members of that family, what excuse has he to offer to his brethren of the profession, what excuse has he to offer to his own conscience?

Dr. Hines:—Ever since 1851, when I began to practice medicine and obstetrics, I am glad to say that I never lett a cord untied. I have never had the misfortune to have a child bleed to death, and I agree most heartily with the gentleman who has just spoken. I think it would be a sin for a man to let a child

die from hemorrhage because the cord was left untied. For torty-four years, I have never known a child to suffer from a tied cord. I have had some to bleed pretty freely until the cord was tied, and I would suggest by all means tie the cord. It can do no harm, and may save an immense deal of pain and loss of life.

Dr. McMullan:-I find that there is one thing I need in my surgical operations before I go further, and that is a trained cow to come along and nip off my cords secundem artem. oughly endorse what has been said in the discussion about leaving the cord untied. It will apply equally well to an artery in the body. I think after a while we will quit tying arteries in our surgical practice if we quit tying the cord. I would like to state my method of dressing the cord. We are all perfectly familiar with the old mammy's way, get a little lard and grease it and tie it up in a rag. I have had some of my brethren tell me that they anointed it. What you want is that the cord should rapidly dessicate. We all know that a dessicated cord should rapidly dessicate. has very little disposition to decompose, and that is what we really want. There is no dressing necessary except to keep the cord off the child's skin. I take the binding and cut a small hole in it large enough to pass the cord through, having previously tied it, and that is all the dressing I do. I believe in fresh air, gentlemen, both in tuberculosis and in the dressing of the umbilical cord. I believe that is the best kind of antiseptic after all. I am cautious to tell the nurse not to apply the diaper so that it will rub the cord. The next day I find a little dessicated I did not do this at first myself, but got it from a professional brother who is a very fine practitioner. Since that time I always dress it that way. As to the calf, of course he doesn't need anything. He stands up, and there is no danger of his stepping on it. The baby lying on its back is different, and of course the cord will lie on its skin, and you know something ought to interpose. I consider that this is the scientific way of dressing the cord—by not dressing. I am like Dr. Lott, I am an iconoclast.

Dr. O'Hagan:—At the risk of prolonging this discussion, I rise to ask the pemission of the Society to say a word or two. I regret exceedingly to hear such adverse criticism upon Dr. Lott's method of dressing the cord. I have never used the instrument which he presents for examina ion, but it is based upon physiological principles. Those of us who have seen military surgery know that an artery that is torn by some blunt projectile will not bleed. In addition to that the neatness and elegance of this principle presents itself to me in a very favorable light. I have never tried it; I never heard of it before, and I am indebted to the doctor for suggesting that method of treating the cord. My own method, I will not worry you by repeating. There is no

special merit in it at all, only that I have never known a child to die from hemorrhage. I really think this method has a certain amount of merit in it. I regret to see that it does not meet with a favorable reception. My friend, Dr. Burroughs seems emphatically opposed, so is my friend Dr. Hays. I say, nevertheless, that that method of treating the cord presents itself in a very favorable light to me. I am quite sure that the method of crushing will be an effectual bar to future hemorrhage, but notwithstanding that, I can see no possible objection to a ligature properly applied, I always want to give everything due and fair consideration, and I must say that I regret to see that the contribution of Dr. Lott has met with fuch adverse criticism. I hope that by next year some of you will be disposed to try it and will be able to throw some light on the actual practice of obstetrics. And I hope that there will be no further adverse criticism of Dr. Lott.

Dr. Kent:—I just want a word in behalf of the old way and in behalf of Dr. McMullan's better way. Occasionally umbilical hernia does occur, and if I were to remove the compression just where it does occur, and should find secondary umbilical hernia, I would be afraid I was at fault to some extent for this having occurred, and I am willing to continue the old way.

Dr. McMullan:—The doctor is laboring under a misapprehension. As soon as the cord drops off, I told a pad and apply over the regions and put a band on top of that and instruct them to

keep it there for a month.

Dr. Burroughs:—Isn't there just as much danger from umbilical hernia before the cord is tied as there would be afterwards?

Dr. McMullan:—No, sir. I have done it fifteen years and have never seen occasion for it. I cut a hole just large enough

for the cord to pass through. I am careful about that.

Dr. Lott:—Gentlemen, I put myself up for a riddling, and I got it. I am grateful to you for your criticism, both adverse and favorable. I brought it up for your discussion and for you to help me decide for its usefulness, and I meant what I said. But in self-defence, I want to say that I take care of my patients. In the first place, in reply to Dr. Burroughs, I will say that it is not necessary to leave the cord as long as I said in my paper. I use the scissors, but not recklessly, I assure you. I do not intend to be criminal, I would not be. In order to insure safety, I did strip the cord and put a ligature about an inch and a half from the umbilicus, but did not tie it down at all. Then I severed the cord with the scissors, and there was no bleeding. Then after I was satisfied that there was no bleeding, I tied the liga-After all, I left my patient with a That made it safe. clear conscience, notwithstanding the fact I did use the scissors and proved that the agglutination of the mashed extremities did occur, and that there was no bleeding. I would not use them injudiciously.

Society Reports.

SOCIETY FOR MEDICAL PROGRESS OF NEW YORK CITY.

MARCH MEETING. SCIENTIFIC PROGRAM.

Dr. Louis Fischer, President in the chair.

Dr. Wm. S. Gottheil presented a cast of a case of sclerosis. This latter term is designated in Germany for what we term chancroid.

Dr. Manly felt sorry that the new nomenclature of sclerosis was adopted by Dr. Gottheil, and believed it would be misleading, as a great many chancroids are not hard.

Replying to the question of Dr. Manly, Dr. Gottheil stated that he used ordinarily Marsden's paste in the treatment of carcinoma. The caustic is far better in the treatment of neopplastic tissue than the knife.

Dr. Gottheil furthermore presented a series of very interesting photographs of the rarer forms of skin diseases.

Dr. Augustina H. Goelet presented a specimen from a patient 27 years old, which proved to be a cyst of broad ligament. He furthermore reported a case of early menstruation in a child five days old. Menstruation had continued naturally for four days but there had been no recurrence.

Dr. Garrigues in commenting upon this case said, that bloody discharges from young girls were not necessarily menstrual, unless they recur regularly. The youngest case known to him was a girl two years old.

Dr. Louis Fischer stated that the case reported by Dr. Goelet was certainly an extremely rare and interesting one. Menstruation could only be considered as such when it recurred at regular intervals. A great many cases reported to him as such were found, on careful examination and especially those under long observation, to be meaely sanguineous discharges due either to irritation, traumatism or other causes. He could, however, remember a single case in which menstruation appeared regularly, in a child under seven years of age. In this particular case the child menstruated from one to three days for nine successive

months, and had epistaxis, lasting several days during the other three months of that same year. He, therefore, believed that the epistaxis could be construed as a vicarious menstruation.

Dr. Augustin H. Goelet next read a paper entitled, "Making and Closing the Cœliotomy Wound."

The author declared the surgeon reckless attempting to open the abdomen with only one stroke of the knife. The experienced surgeon knows too well that there is danger of wounding the intestine by such a course. Experience teaches him when he may economize time to the best advantage of his patient, in in order that he may achieve the best results. He must take time to both make and close the abdominal wound.

For closing the abdominal incision he used two kinds of sut. ures, viz: First, interrupted deep sutures of silk worm gut including the whole thickness of the abdominal wall, and a continuous suture of chromicized cat gut of small sizes for uniting the peritoneum, muscles and fascia. The silk worm gut sutures are introduced first, then beginning at the upper angle of the incision, having a long strand of chromicized cat gut, the peritoneum and muscular layer below the fascia are united with the continuous suture down to the lower angle of the incision. From this point without tying it, the same suture is continued from below up to the upper angle, uniting the fascia; here it is tied to the free end of the suture at the starting point. In this manner one knot is required, and only one at the upper angle of the in-When the tension is not great, this suture is not even There is a decided advantage in having no knot in the tied. wound. The special feature consisted in including the muscular layer with the peritoneum in a continuous suture, which obviates the formation of pockets between these layers, as will happen when they are united separately.

This method of uniting the abdominal incision, gives the strongest possible cicatrix. Primary union occurs invariably and the author declares he has never had a hernia following any of his operations since he has adopted this method, and no weakness of the abdominal wall.

The dressing and after management is simple; covering every thing with a thick layer of dry markasol, over this a pad of sterilized gauze is placed, held in place by broad adhesive strips, and over this are several layers of sterilized absorbent cotton and bandage. The dressing is left undisturbed for a week, when the powder is brushed off, and if the latter is found caked, the surface not washed and a fresh layer of powder is applied and a similar dressing. This is allowed to remain for another week, when the deep sutures are removed, then some of the same powder and a similar dressing is applied for another week. A permanent abdominal bandage may then be adjusted.

DISCUSSION.

Dr. Garrigues said he had no remarks to make.

Dr. Manly said that Dr. Goelet dealt only with the lower abdomen, and most of these operations require some drainage, and therefore, the wound could not be closed entirely. He believed further that the incision might have been lengthened.

The speaker laid stress upon the need of a large incision, sufficient to expose the abdominal contents. He assured his hearers that a large incision offers no greater danger of ventral hernia than does a small incision.

Dr. Parker Syms expressed his disapproval of the McBurney incision, but approved that of Detmold. He laid stress on the need of seeing in abdominal work which is attainable only by large incision.

The vital point of safety is attained by the layer suture through which the danger of ventral hernia is reduced to a minimum.

Dr. Goelet in closing said, he had intentionally limited his paper to the closure of the colitomy wound. He preferred in all cases to close the abdomen and drain through the vagina.

For suspensio uteri or for removing appendages, he prefers a small incision, and the incision should always be as small as possible, consistent with thorough work,

The next paper was read by Dr. Boleslaw Lapowski on "Parasitic Diseases of the Skin."

Among the parasitic diseases of the skin, the affections due to vegetable parasites are of most importance. They may be divided into two classes. First, according to the tendency of the fungus to attach itself only to the superficial layers of the epidermis, as in pityriasis versicolor and erythrasma, or second, where they involve the deeper strata of the epidermis, invading the hair follicles and the hair shafts as favus and the trichophytosis.

The speaker dwelt mostly upon tinea tonsurans of the hairy

portion of the body, giving its clinical and bacteriological characteristics. In selecting the remedies we have to be guided by the character and property of the fungus, using mild anti-parasitic remedies, as green soap, salicylic acid, boric acid, in the superficial forms and treating the fungus in the hair follicles with stronger remedies, like tincture of iodine. Ointments are of less use than liquids, as they do not penetrate the hair follicles as easily as liquids. Here the value of boric acid solution and tincture of iodine is most pronunced.

Radical epilation is the best remedy. By producing artificial inflammation, the epilation is easier acomplished. In using croton oil, formalin and chrysarobin, the patient must be carefully watched by the physician.

A health certificate to a chid can only be given after a very close inspection with a magifying lens, as it is not rare to find short broken off hairs amongst the healthier ones.

DISCUSSION:

Dr. Gottheil confirmed the authors views on the intractability of ringworm of the head. Ringworm ends when puberty comes. In Ireland it is considered incurable.

Dr. Bleimann agreed that ringworm and favus are essentially chronic diseases. In his opinion the diagnosis of scabies requires the services of a dermatologist.

Dr. Goelet asked why the parasitic diseases are not curable, and whether metallic electrolysis would not be efficacious.

Dr. Phelps reported thirty m. c. cupric electrolysis for fifteen minutes without result.

Dr. Lapowski in closing the discussion said: The best results had been attained by him in using a simple boric acid wash-1-600. The use of iodine was also commended.

In dealing with fungi it was well to remember that not every anti-parasitic remedy is a good antimycotic.

At Prot. Pick's Clinic, in Prague, investigation proved the value of boric acid solution as the best antimycotic remedy.

Regarding electrolysis, he believed that where the diseased hairs were not numerous, the use of the electric needle was accompanied by good results, but where the diseased hairs were numerous, electrolysis was not practicable.

The meeting then went in executive session.

NORTH CAROLINA MEDICAL JOURNAL.

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Editorial.

THE INVASION OF CUBA AND YELLOW FEVER.

Should President Mc Kinley send an army of invasion to Cuba, says the International Medical Magazine, editorially, it campaign under far more favorable circumstances than any large body of tropical invaders in the past. It is well understood that the most vital problem of warfare in a strange climate is the maintenance of the health and strength of the invading army. In tropic climates the endemic diseases, especially fevers and intestinal disorders. are as formidable opponents as the native armies, in fact in Cuba the chances of sickness or death from disease are greater than being maimed or killed by shot and

shell, even of the new and formidable type. Any army from the United States will depart with an intelligent comprehension of the necessity of the strictest hygienic precautions. In this campaign the real governing officer will be the sanitarian, and he must have the heartiest cooperation of the naval, military and civil authorities in every branch of the governmental service. The Cuban campaign must be short and decisive. There will be no time for acclimatization, nor is there need of it. With our modern bacteriolgic 1 and hygienic knowledge we are supplied with the means for what for all practical purposes is equivalent ot immediate adaptation. Observation of the laws of living evolved from years of patient study of tropical hygine, the proper selection of camps and hospital sites, rigid sanitary rules, prompt isolation of those infected will render a repetition of the dreadful mortality of the Spanish army very unlikely.

While all this sounds very well, we can but feel that it is too optimistic a view to take of the matter. It is true that Surgeon Sternberg is an expert on yellow fever and an authority on tropical diseases, and that the medical officers of the army and navy are well equipped in bacteriological and hygienic knowledge but the conditions under which they will be called upon to put this knowledge in operation will be very, very trying. We cannot free our minds from the fear that disease will play a very terrble part in thinning the ranks of our army in Cuba, for it is there at the time of this writing. The war in Cuba may not be as short and decisive as we would wish, for there is already reports that the attack upon Havanna will be postponed until the Fall. Let the invasion of the southern coast be successful, the captured towns and forts must be held, the Spanish prisoners must be taken care of, and the insurgent allies must be in constant contact with the army. It is safe to say that the army will have to remain in Cuba all summer, and the prbability is that there will be much fighting to do, and many wounded among friend and foe that will have to be cared for by the medical staff. they have time to look after the wounded and sick of a-moving army and time to fight an epidemic of yellow fever among nonimmunes beside? If, in times of peace in our own country, with the aid of state Boards of Health, the disease got so completely beyond control as it did in the South last summer what are we to expect with such conditions as confront us in Cuba?

There is also to be considered the still more important question of the danger of importation of the disease into this country. With a large army in Cuba and the necessity for furnishing it supplies there will, of necessity, be constant and close communication with this country. It is hardly reasonable to suppose that the exigencies of war will admit of the detention in quarantine of the vessels that are engaged in this work. The danger of bringing the contagion to this country will threfore, be very great, and the watchword of the boards of health of the southern states must be "eternal vigilance". If, however, the result of the war will be that there will be such a regard for sanitation in the Island as will finally eradicate the disease, and so free the South from a great part of the danger that threatens it each summer, the cost will not be to great.

Since writing the above we see from the press reports that the advice of the doctors about keeping the feet dry, sleeping out of the night air, drinking only boiled water, etc., have been found utterly impracticable. War means death.

WAR REVENUE TAXES ON DRUGS.

This would seem to be a subject that would not affect doctors, but as there are many physicians in the country that furnish their own medicines to their patients, and quite a number who conduct drug-stores in connection with their practice, and as some of these later even deal, with shame be it said, in regular patent medicines, a brief reference to the law may not be out of place here.

The law goes into effect on the first day of July, 1898, and failure to comply with any of its provisions makes the offender guilty of a misdemeanor and liable to a fine of not more than \$500, or imprisonment six months, or both, at the discretion of the Court.

The following are subject to the tax: Any pills, powders, tinctures, troches or lozenges, syrups, cordials, bitters, anodynes, tonics, plasters, linaments, salves, ointments, pastes, drops, waters, except natural spring waters (and carbonated natural

spring waters), essences, spirits, oils, and all medical preparations or compositions whatsoever, made and sold, or removed for sale by any person or persons whatever, wherein the person making or preparing the same has or claims to have any private formula, secret, or occult art for the making and preparing the same, or has, or claims to have, any exclusive right or title to making or preparing the same, or which are prepared, uttered, vended, or exposed for sale under any letters patent, or trademark, or which, if prepared by any formula, published or unpublished, are held out or recommended to the public by the makers, venders, or proprietors thereof as proprietary medicines, or medical proprietary articles or preparations, or as remedies or specifics for any disease, diseases or affection whatever affecting the human or animal body, essence, extract, toilet water, cosmetic, vaseline, petrolatum, hair oil, pomade, hair dressing, hair restorative, hair dye, tooth wash, dentifrice, tooth paste, aromatic cachous, or any similar substance or article, by whatsoever name the same heretofore have been, now are, or may be hereafter be called, known, or distinguished, used or applied or to be used or applied as perfumes or as applications to the hair, mouth, or skin, or otherwise used, chewing gum or sustitutes therefor.

The rate of tax is for articles retailing at o5cts., ½ of 1ct., those seiling at 10 cts., ¼ of 1ct.; those seiling at 15 cts., ¾ of 1ct.; those seiling at 15 cts., ¾ of 1 ct.; on chewing gum or its substitutes four cents on each \$1 of seiling price or fraction thereof; on sparkling or other wines 1 ct. on each bottle of one pint, and 2 cts. on bottles of more than one pint. Articles on hand July 1, 1898, shall be subject to the above tax but dealers who are not manufacturers will not be required to affix the stamp until the article is sold. We suppse that a doctor who dispenses his own medicines would come under the law in the same category with the druggist, and would have to affix stamps to any taxable article he might have on hand July 1, 1898.

Reviews and Book Potices.

Annual and Anal ytical Cyclopedia of Practical Medicine.—By Charles E. de M. Sajous, M. D., and One Hundred Associated Editors, assisted by Corresponding Editors, Collaborators and Correspondents. Illustrated with chromo-lithographs, engravings and maps. Volume I. Abdominal Injuries to Bright's Disease. Cloth, 600 pages. The F. A. Davis Co., Philadelphia, 1898.

This work is designed to take the place of, and to be an improvement upon, the Annual of the Universal Medical Sciences, which has been published under the editorship of Dr. Sajous during the past ten years. It will be issued in six handsome volumes of about 600 double column pages each, and will be completed in three years. The Annual has proven a most useful work of reference for teachers and authors but it did not exactly fill the want of the general practitioner. In this new work especial regard has been had for the need of this class of physicians, and there can be no doubt that the effort to meet this want has been successful. At the same time the work will be fully up to the Annual as a work of reference. For example the article on "abdominal injuries" contains one hundred and sixty excerpts, while that on "appendicitis" has even more. excerpts are given ver batim with the name of the author and source in full, the various journals not being referred to by number. These excerpts cover the last ten years, the literature for the last two years being separated from that of older date. In addition to the appearance of these volumes, two each year, there will be issued each month the Monthly Cyclopædia of Practical Medicine, which will keep the review of medicine and surgery up to date. The work is beautifully illustrated with cuts and colored plates, is printed on excellent paper, and the type is clear and pleasant to read. We commend the work as a most decided advance upon the Annual and one which will prove exceedingly useful to all classes of physicians.

The work will be sold by subscription only at \$5.00 a volume, which includes the Monthly Cyclopædia. Subscriptions will be taken only for the whole work.

An Epitome of the History of Medicine.—By Roswell Park, A. M., M. D., Professor of Surgery in the Medical Departmen

of the University of Buffalo, etc. Illustrated with Portraits and other Engravings. One Volume, Royal Octavo, pages xiv—348. Extra Cloth. Beveled Edges, \$2.00 net. The F. A. Davis Co., Philadelphia, 1898.

Every physician should take pains to inform himself to some extent upon the history of his profession. Dr. Park who is well known as a pleasant writer as well as an able physician, regrets the fact that the history of medicine has been so much neglected in our medical schools, laying especial stress upon the valuable lessons we might lean thereby of what not to do. This is not intended as a full dissertation upon the subject, but it does give briefly a very readable and useful review of medical history from the time when "medicine was not a science, but an undigested collection of experiment notions, -vaguely described, disfigured by tradition, and often made inutile by superstition and ignorance," to the days of Pasteur, and Koch, and Lister, McDowell, and Sims and the other great men who have done their part to bring medicine to its present important place among modern The book is written in such a style as to make it attractive to the physician and the layman alike, and will do much if placed in the hands of the latter to inform the world of the very important place that the great leaders in our profession hold among the men who are recorded as "great."

The work is attractively illustrated with engravings of many medical celebrities, obsolete instruments and apparatus, etc.

The Electro-Therapeutic Gu'de.—By Wm. F. Howe, M. D., Ph. D., President of the National College of Electro-Therapeutics; Editor of the Electro-Therapeutist; etc. Third edition, enlarged and revised. Wm. F. Howe, Indianapolis, Ind. 1898.

This little volume of about sixty pages contains valuable information for the general practitioner who uses electricity occasionally; it describes the different currents and tells there therapeutic action; it gives the various diseases for which electricity is recommended and suggests the method of use; it gives and defines the various terms used in electro-therapeutics; it tells which are the most useful batteries and how to make and care for them.

Correspondence.

REPLY TO DR. H. S. LOTT'S "FURTHER DISCUSSION OF DR. R. L. PAYNE'S PAPER ON ABORTION."

Editor of N. C. Medical Journal.

HIS is exceedingly hot weather for a lazy man to enter a controversy, but as Dr. Lott has taken issue with me as to certain points which I made in a paper on "Conservatism in the Management of Abortion," read at the last meeting of the North Carolina Medical Society. I feel bound to reply briefly lest some one who reads only on the surface may be led into error. As to medication with "large doses" of virburnum prunifolium Dr. Lott objects first because he says that innineteen women out of every twenty the viburnum produces nausea and vomiting and thus increases hemorrhage. This is certainly the language of extreme hyperbole for while I am free to admit that the taste of the fluid extract of haw is very unpleasant to most people, this remedy is in no sense emetic, and when vomiting results from its administration the result is entirely attributable to the unpleasant taste which gives offense to the fastidious palate and which may be, and indeed, always is, prevented by the man who knows and handles his remedy wisely, by simply giving the solid extract of virburnum in capsule. For years I have used the remedy in no other way.

Again, Dr. Lott objects to the administration of the haw in these cases because the vomiting—which I maintain rarely occurs in any case, and may be prevented in all,—increases hemorrhage, but, if the doctor will only read my paper with his glasses on, he will find that I distinctly advise against the use of viburnum in abortions if there be any reason to fear hemorrhage, not because I fear that possible vomiting may increase hemorrhage,—every physiologist knows in a general way nausea and vomiting are one of nature's most efficient aids in the arrest of severe hemorrhages,—but because the viburnum Prunifolium is one of the most certain paralysants of unstriped muscular fibre and so by preventing contractions of the uterus hemorrhage would be permitted to go unchecked to even a dangerous extent.

A few years ago I published the results of quite an extended study of black haw (Transactions N. C. Med. Soc. 1888), in which

I successfully demonstrated that 'Viburnum paralyses both the centers of voluntary motion and the reflex functions of the spinal cord.'* Before the stage of paralysis is reached however, paresis to almost any extent may be produced by the proper administration of the remedy and for this reason all cases of abortion threatened through nervous agencies may be arrested by the administration of viburnum conjoined with absolute rest of mind and body.

Of course if there be much hemorrhage, indicating extensive separation of the ovum, the remedy would be contradicted, both because of the increased danger of hemorrhage from lack of contraction in the uterus and also for the same reason the expulsion of a dead ovum would be delayed.

Dr. Lott after disposing of the use of viburnum in cases of abortion by simply ranking the remedy as an emetic, again referring to my paper writes "His plea for care in the use of the curette, is most excellent, save, that in making his exception he drops the keystone from the arch and destroys the whole structure" and then quotes from my paper as follows, "while I believe there is a field for the use of the curette in abortion, I believe it is strictly limited to septic cases, and those in which the products of conception having escaped, hemorrhage is kept up by retained placental fragments." Dr. Lott then proceeds to comment in the following language, "now picture the pathology of a septic uterus with infiltrated, softened and friable wallst and you cannot fail to realize the danger of perforation or other trauma to these walls by a feelingless metal instrument blindly at work in a dark cavity, * * * * Remove the remaining placental tissue with the cushioned end tof a clean finger, pressing the uterus down with the left hand above the pelvis, irrigate the cavity of the uterus with half a gallonof hot water * * using a Davidson's buld syringe with the end of the nozzle presenting in the internal os * * * * * Truly Dr. Lott must have mistaken the whole intent of my paper, else he would not have thought I dropped the keystone from my arch and destroyed *These studies were quite extensively copied by both American and Foreign Medical Journals and in the last edition of Shoemaker's Materia Medica and Therapeutics the conclusions of the writer have been adopted in tota and with due credit.

[†]Italics mine.

Iltalics mine.

the whole structure of my argument when after advising strongly against the unnecessary use of the curette and expressing my earnest conviction that sepsis rarely occurred in case of abortion where meddlesome efforts to hasten the abortion were lacking. I still felt bound to admit that an occasional case does arise in which septic infection has occurred and in these cases curettage is imperatively and immediately demanded. Hence, it has long been my practice, as soon as any sign of septic infection occurred to at once, under anæsthesia, as thoroughly as possible remove the whole remaining product of conception and not stopping at that if there be reason to believe a septic endometritis has occurred I proceed to scrape away, as thoroughtly as possible, the whole uterine mucosa, and then irrigating thoroughly with warm, sterilized water by means of an intra-uterine irrigator the bag of the fountain syringe being held at slight elevation so as to avoid any great pressure. The cavity of the uterus is now swabbed over with Tr. iodine, a strip of iodoform gauze carried to the fundus (I never pack the uterus in these cases) simply to promote drainage and the woman put to bed. Having done this I feel I have done the best that can be done under the existing conditions, and though I may have chosen between evils I am sure I have chosen the least evil. I would not dare wait until the septic process has progressed so far that the walls of the uterus are "infiltrated, softened and friable," and if a doctor does not diagnose and treat uterine sepsis until the organ is practically rotten instead of making matters worse by forcing a finger through a "friable" os that would tear under the slightest strain or pressing a "softened and friable" uterus down from above the pubis upon a finger that is liable to punch through its walls at any moment, or washing out its cavity with all the uncertain force of a Davidson's bulb syringe, taking all sorts of chances of forcing water and septic matter through the fallopian tubes, in my humble opinion it would be better to arrange for the autopsy. But apart from the folly of waiting till sepsis has progressed to the extent of producing "infiltrated, softened and friable" walls, even though a faithful effort and proper time be made to clean out the uterus in septic abortions, with the finger the result must be very unsatisfactory. It is very rare that the uterus can be thoroughly explored with the finger and if the

abortion occur at any time from the third to the fifth month the very depth of the uterus will prevent anything like a thorough exploration by the finger, and even if this could be done satisfactorily all who have had much experience in these cases will bear me out in saying adhering placental fragments cannot be removed by the "cushioned end" of a finger; nothing short of a sharp stiff nail beyond that "cushioned end" would suffice and this would be practically a curette almost impossible to make clean. Beside all this if a septic endometritis was present nothing could be accomplished for its relief or to stay its progress through the tubes into the pelvis.

In conclusion then, let me reiterate my position taken in my former paper. So long as obortion is progressing safely even though it may be slowly all sorts of interference and especially curettage is to be deprecated. Nature is, in the vast majority of cases, thoroughly competent to take care of herse'f, but so soon as septic symptoms arise then the uterus must at once be emptied of its contents and though the curette is an instrument full of possible dangers,—dangers I have carefully pointed out in my former paper, -still in the crisis at hand-a crisis I admit often brought about by previous meddling—the thorough, intelligent use of this instrument offers the best chance of escape. Let us never wait until the uterus is so thoroughly septic as to present "infilterated, softened and friable walls" and we must be sure that the operation is done as thoroughly as possible and with every attention to technique we would give to a laparatomy. No. 300 Freemason St., Respectfully,

Norfolk, Va.

R. L. PAYNE, M. D.

Reviews of Current Literature.

GYNECOLOGY AND ABDOMINAL SURGERY.

IN CHARGE OF

H. S. Lотт, M. D.,

J. W. Long, M. D.,

HUBERT A. ROYSTER, M. D.

URETERAL ANASTOMOSIS.—In the June, 1898, issue of the American Gynecological and Obstetrical Journal Howard A. Kelly has an elabo-

rate article on Ureteral Anamostomosis. Like all his work it is first class in every particular. He calls attention to the fact that every operator of wide experience has occasionally injured the ureter. Martin had 2 cases in 202 total extirpations. F. von Winckel estimates 17 injuries in 774 total extirpations of the uterus. Robinson 3 in 100; Kelly's average is 1 in every 500 abdominal sections for all causes. If these men of great experience and expertness sometimes injure a ureter, how can those with less experience escape this accident? I have never injured a ureter that I am aware of but Kelly points out that many more are injured and the disease not recognized than otherwise. ureter is cut or occluded by ligature or injured in any one of the several ways to which it is liable, the patient usually dies, unless the damage is repaired at once, but experiments on dogs prove that in them the ureter may be ligated and life continue though the kidney atrophies and in the human subject the same thing has happened.

The author enumerates the various ways in which the ureter may be surgically injured and the operations during which such injury may occur. He goes further and puts forth very clearly how this accident may be avoided, laying great stress (and very properly so) on the insertion of bougies in the ureters in all cases in which extensive dissection must be done, as in carcinoma. I do not think that any abdominal surgeon should consider himself properly equipped until he can introduce a catheter or bougie in the ureter and that expeditiously. Even the presence of the ureteral bougies does not invariably prevent injury to the ureter as is shown by a ureteral fistula following an operation in the hands of Dr. Kelly himself in which he used the bougies.

Kelly lays down the invariable rule that at the close of every difficult abdominal enucleation when the complications have been about the pelvic floor the ureter must be inspected and their integrity assured."

After naming the different anastomotic procedures, he says "when the ureter is divided in an operation the general rule should be to anastomose it at once, either to its divided lower end, or into the bladder." The other procedures are to bring the divided (upper) end into the abdominal wound, or switch the end into its fellow of the opposite side, or turn it into the rectum.

Should the injury escape notice at the time and a fistula result there are a number of ways to deal with it: if the fistula is vaginal the ureteral opening may be diverted into the bladder by (1) one of the several vaginal operations or (2) the abdomen may be opened and the ureter turned into the bladder, or (3) anastomose the ureter into the bladder by the extraperitoneal method, or (4) open the bladder from above expose the ureter and suture it into the bladder, or (5) extirpate the kidney. In a case cited in which both ureters presented at the upper end of the vagina, following a total extirpation, Kelly skillfully denuded a strip on the upper posterior wall just below the ureteral orifices,

split the bladder open from side to side, whipped over the posterior edge of this incision to prevent bleeding, and sutured the anterior edge to the denuded vaginal strip. The ureteral orifices without having been disturbed were now inside the bladder. This was a clever operation and worthy the man who did it.

The author claims, however, that the ideal plan of doing uretrocystostomy is the extraperitoneal method. He gives credit to Fritsch for first suggesting it but claims to be the first to actually do the operation. He cites the only case on record. The abdominal tissues save the peritoneum are divided just over Poupart's ligament, the peritoneum dissected loose from the pelvic wall, the ureter exposed and divided as far forwards as possible, the bladder split and the ureter sutured into it. This can all be done without opening the peritoneum and is certainly a decided improvement in the way of operative procedures.

This article is well worth careful study by every abdomidal surgeon.

J. W. L.

RETRO-DISPLACEMENT OF THE UTERUS.—In a brief clinical lecture on this subject, Robert H. Uzlie (N. Y. Poly clinic, May 15, '98) reviews the causes, methods of prevention and treatment of uterine retro-version. He enumerates the many and varied anatomical supports of the womb, about which every writer seems to have a different opinion. Constipation, faulty habits of urination in women, and subinvolution, especially after abortions, are given as the chief causal factors. Attention is called to the fact that the uterus is a particularly movable organ, and that it assumes various positions without harm or symptoms. Prevention consists in proper care of a woman after miscarriages or full-time births—tampons and cleaning out the uterus and repair of all lacerations of the perineum and cervix in the latter. As for operative measures in retro verson, the author prefers Alexander's method of shortentng the round ligaments, though he admits that it ought to be limited to carefully selected cases, having performed it himself not over 15 times He does not see the advantage of operations on the anterior vaginal wall nor of shortening the round ligaments inside the abdomen, and, theoretically, he is opposed to ventral suspension. A patient was exhibited upon whom the author had done an Alexander's operation one year ago, the womb remaining in excellent condition and position.

[Much thinking and talking is now going on anent the best treatment of the retro-displacements of the uterus. Every one of the operations done for their relief has enthusiastic admirers and opponents, while none of them seem to be invariably successful. The truth would seem to be that each case is a law unto itself and that we must suit the operation to the case, not the case to the operation. It will remain for some young man in the profession to distinguish himself by inventing an operation which will permanently cure retro-version of the uterus. The condition, however, is often greatly exaggerated and stress laid on

symptoms which are not due to the position of the womb. In the Medical Record of June, 4, '98 F. P. Hammond contributes a unique and very apropos paper on: "A belief that so-called displacements of the uterus are not pathological." He quotes and emphasizes the observation of Fritsch, that "since the womb is normally movable, we cannot speak of a definite normal position," and regards no position as abnormal per se, except complete prolapsus. This question is well worthy of study and, especially, by those who would attribute every pain and ache of woman to a backward-displaced womb.]

H. A. R.

GENERAL SURGERY.

IN CHARGE OF

H. T. Bahnson, M. D., R. L. Gibbon, M. D., J. Howell Way, M. D.

RENAL CALCULUS.—Mr Henry Morris, probably the greatest of living authorities on renal surgery thus summarizes a recent lecture delivered before the Royal College of Surgeons of England on "Renal Calculus," (Brit. Med. Journal, N. Y. Med Journal, May, '98).

- 1. That the aim of the surgical treatment of renal calculus should be to extend the application of nephro-lithotomy, and thereby restrict the necessity of nephrectomy.
- 2. Than more frequently than not the failure to find a stone is not in reality a failure of treatment, because there are so many curable morbid conditions which mimic renal calculus, and which are discoverable only by exploration.
- 3. That the theory that a stone in one kidney, whether that kidney is itself painful or not, reflects or transmits pain to the opposite kidney is quite unproved; that it is a dangerous theory, calculated to lead to very erroneous practice; and that the surgical principle with regard to exploratory operations should be that with pain, paroxysmal or continious, on one side only, the kidney on the painful side should be explored.
- 4. That neprhectomy for calculous conditions is not often called for, and should be done only in exceptional cases. Nephrotomy for calculous pyonephrosis is the proper operation, at any rate as a primary operation, because of the frequency of double calculous disease. Experience has shown that kidneys from which stones weighing eight hundred and thirty grains and one thousand three hundred grains have been removed are functionally sufficient to maintain life during the blocking of the ureter or suspended action of the kidney of the opposite side.

- 5. That nephrectomy while the opposite organ is occupied by calculus is fraught with the greatest danger to life; whereas nephrectomy, after the opposite kidney has been freed of stone, will probably be followed by recovery from the operation and possibly by very good health for many years afterward.
- 6. That when renal calculus causes reflected or transferred vesical or ovarian pain, the removal of the calculus will be followed by complete cure of the bladder or ovarian symptoms.
- 7. That in some renal calculous conditions are attended by very remarkable nervous symptoms, sometimes without high temperature, and that information as to the cause of these symptoms is needed.
- 8. That unsuspected renal calculi are a source of very real danger to their possessors; and when, whether by accident or by the systematic examination of the urine, we have cause to suspect the presence of a calculus, we should recommend its immediate removal, regardless of the fact that it is not causing renal or transferred pain.
- 9. That quiescent calculus is as dangerous to the individual as unsuspected calculus, and ought to be removed by operation.
- 10. That the hitherto accepted teaching, that a renal calculus, if causing only mild symptoms, or attacks of severe colic of only recent occurrence, should be treated on the expectant plan, ought to be discarded as unsound in theory and dangerous in practice.
- 11. That the same principle should be applied to renal calculus which has long been the rule in regard to vesical calculus—namely, when suspected it should be searched for, when known to exist removed, without waiting in the hope that it may become encysted or spontaneously expelled.
- 12. That the very low mortality of nephrolithotomy puts this operation upon the same footing for renal calculus as lithotrity in the most experienced hands for vesical calculus.

 J. H. W.

TUBERCULOUS GLANDS OF THE NECK; THEIR EARLY AND COMPLETE REMOVAL.

LAPLACE, (JOUR. AM. MED. ASSOCN, JUNE, '98)—Adenitis so often seen in adolescence and middle age wherein tubercle bacilli invade the lymphatic glands of the cervical region, though not always so regarded, is one of the most important pathological conditions coming under the observation of the surgeon. In all such cases the danger of systemic infection exists, and if such does not actually take place, the toxines generated are absorbed to the detriment of the general vitality of the organism.

By direct anatomic connection these glands are infected with tubercule bacilli through the lymphatics of the nose and mouth. Their irritant action in the lpmph channels between the acini of the glands induce an increased activity of tissue change which causes a proliferation of endothelial cells. There is also an increaseed development of the glandular fibrous tissue but notcommensurate with the growth of the former. This accelerated activity of tissue change usually begins at the center of the gland and during the first stage presents hyaline appearance. Later caseation or fatty degeneration

takes place. It is at this stage that secondarry infection of the enlarged glands by streptococci may occur with the result of inducing supuration. An interesting analogy is here noticeable between this process and similar changes in the lungs where a cheesy tubercule suppurates under the influence of the infective germs introduced through the atmosphere.

That every tuberculous foci when accessible should be removed is too well established at the present day to demand further consideration.

In tubercular enlargements of the cervical region two methods may be considered. One, the local applications by injection or external treatment based on the idea of exciting active inflammatory changes with a view to hastening absorption and elimination, is not to be condemned, but it is not the best way of dealing with such tissues.

The sooner the complete dissection and removal of these chronically enlarged glands is undertaken the better it is for the individual. To describe in detail the method of removal is unnecessary; suffice to say due care should always be had not to injure other structures. The existence of well-marked tubercular pulmonary disease is really the only contraindication to the prompt excision of all enlarged cervical glands. With judicious administration of tonics after removal there will be a marked improvement in the general health of patients quite surprising to one who has been in the habit of treating such cases by the methods formerly so much in vogue. The deformity resulting from a careful dissection is far less than is seen where the tissues break down under streptococci infection. Hence from a cosmetic standpoint the operative treatment has much to commend it.

J. H. W.

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OPERATIVE SURGERY AT GREAT AND SMALL ALTITUDES, -Dr. Charles A. Powers, of Denver (Western Medical and Surgical Gazette, N. Y. Med. Journal,) discusses the comparison of surgery at small and great attitudes. He advises the avoidance of operation where possible on persons who have recently come from the sea level, and especially if they show any cardiac weakness, owing to the increased action of the heart and lungs rendered neccessary by the ratefied atmosphere. Pulmonary invalids, however, who are well at great altitudes frequently suffer if removed for operation, and in some caes such invalids might with advantage be removed from the sea to a higher level for that purpose. As to the anæsthetic, Dr. Powers finds that he is getting to place more and more reliance upon chloroform, ether being generally more irritating than in a moist climate, probably because of the moisture of ether vapor. Of two hundred and forty-eight operations in four years in Colorado, Dr. Powers employed ether in one hundred and fifty-nine, and chloroform in eighty-nine. One of his deaths he attributes to ether. The author's personal observations do not bear out the general idea that shock is more severe than at the sea level. Hæmorrhage in general is rather more profuse at great altitudes' particularly the oozing from the smallest vessels; bleeding, however, he considers a little better borne, and saline infusion less frequently demanded. The chance of asepsis he considers equal in either situation, with a proper technique. Operation wounds in tuberculous patients

he considers heal more rapidly, and the healing is more permanent in Colorado, and he remarks upon the small proportions of pulmonary invalids in whom surgical tuberculosis is developed.

J. H. W.

VOLVULUS OF THE CÆCUM.—M. Zoge von Manteufiel (Gazette hebdomadaire de medecine te de chirurgie, N. Y. Med. Journal.) reported to the Congress of the German Society of Surgery at Berlin an account of twenty recorded observations of volvulus of the cæcum, to which he added four cases of his own. He remarks that those patients submitted to expectant treatment all died, while of those operated on by laparotomy three recovered. M. Zoge had only one death in his own four cases, that death taking place in a case where an artificial anus was made.

J. H. W.

SARCOMA OF THE RIGHT CLAVICLE; RESECTION FOLLOWED BY ENTIRE RESTORATION OF FUNCTION.—M. A, Besson (Journal des sciences medicales de lille, N. Y. Med Journal, in a communication to the Anatomico-clinical Society reports a case in which the entire clavicle was resected by Professor Duret for sarcoma. Union took place by first intention, and the patient left the hospital at the end of three weeks having recovered perfectly all the movements of the right arm.

J. H. W.

PEDIATRICS.

IN CHARGE OF

J. W. P. SMITHWICK, M. D., LAGRANGE, N. C.

Lornez method of forcible correction of congenital dislocation of the HIP:—Royal Whitman, M. D. (Pedatrics' Vol. Nos. 9 & 1c) gives a very lucid description of Congenital Dislocation of the Hip and its treatment by the Lornez method. The condition is hardly ever recognized until the patient begins to walk, and then there are limping, protuding abdomen, shortening of the affected leg, and lordosis. These symptoms are often mistaken for those of Rachitis. The most important element in success, he claims, is early treatment before the changes about the joint have made a cure by this or other means, difficult or impossible. He says, that a persistent limp, if not attended by pain, and if not caused by paralysis or evident deformity, is almost pathognomonic of dislocation. If the thigh be flexed and adducted to the extreme limit, the head of the displaced bone may be easily palpated beneath the gluteal muscles. In the Lornez method of treatment the parts about the joint must be stretched sufficiently to allow the head of the bone to be brought into direct contact with the rudimentary aectabulum, in which position it must be held, so that the weight of the body will constantly force the head against the soft tissues of the cavity, thereby enlarging it to its

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normal capacity. This is called the "functional weighting" method in contradistinction to the forcible correction of Paci.

The steps to the operation are: First, Elongation of the limb. The trochanters must be brought down to the level of Nelaton's line, or lower. This may be done by weights or manual force at the time of operation, the latter usually sufficing. The child having been anæsthetised, a folded sheet is passed between its legs and the two ends are held by an assistant above the shoulder of the side to be operated upon. The operator then seizes the thigh and begins a series of alternate stretchings and relaxtions until the reresistance of the tissues is entirely overcome. The leg is now as long or longer than its fellow, and lies limp in an abducted position. The second step is Reposition, in which attempts are made to force the head of the femur over the posterior margin of the acetabulum through the opening in the contracted capsule. To do this; flex the thigh to about 90 degree to relax the capsule; then gradually, but forcibly, abduct under traction to a right angle with the body; then rotate slightly inward, and press downward above the head of the displaced bone, and it is then lifted up and drawn over the obstacle formed by the rim of the acetabulum. If this is successfully accomplished, a distinct sound and shock is heard and felt, and the leg remains fixed in a position of fexion and abduction. The third is Acetabulum formation. The enlargment of the opening into the acetabulum part of the capsule is attempted. In this the thigh is rotated forcibly outward again. and again and extended to its full limit, so that the capacity of the new articulation may be increased. When the manipulation is complete the thigh is fixed by a spica-plaster bandage extending to the knee, in the attitude of extreme abduction and extension. It is kept in this position for two or three months when the bandage is taken off and replaced. It is well to continue the treatment for a year or more in most cases.

J. W. P, S.

Motes and Items.

Animal Fashion.—A writer in a Chicago exchange tells the following story: While attending a confinement he saw the nurse return, soon after the placenta had been expelled and taken from the room, with a small piece of meat well peppered and salted, which the young mother ate. It was explained that "the meat was a piece of the afterbirth, taken to prevent afterpains; for that is how all animals do." The revolting morsals was given the credit for an early "getting up."—Med. Age.

VACCINATION IN JAPAN.—In Japan not only is vaccination

compulsory, but the law directs that revaccination shall be practised after every five years. In 1896 legal enactments were especially made for the production and distribution of vaccine, and calf lymph is exclusively employed, prepared with antiseptic precautions. Thus the Far East profits by the teaching of the West, and afterwards the West has to learn wisdom from the East.—Med. Age.

SEABOARD MEDICAL ASSOCIATION.—The next meeting of this young association which was to have been held at Nag's Head, N. C., will be held at Virginia Beach, July 14th and 15th. The place of meeting had to be changed on account of the failure of the hotel of Nag's Head to be opened.

P. BLAKISTON'S Son & Co.—The partnership hitherto existing between Presley Blakiston and Kenneth M. Blakiston, under the firm name of P. Blakiston, Son & Co., expired June 30, 1898, on account of the death of the senior member.

The business of publishing, importing, and dealing in medical and scientific books, as established in 1843, will be continued by Kenneth M. Blakiston, trading as P. Blakiston's Son & Co.

The consolidation of the University and Bellevue Hospital Medical Colleges, of New York, has been consummated, and the 126 professors of the new school announced. Dr. E. G. Janeway will be the Dean. The New York University has received a gift of \$50;000 for the Productive Endowment Fund. The giver is not announced, but it is believed that Miss Helen Gould, who has been liberal in her donations to the University, has added to the sum of her benefactions.

Reading Motices.

"The Ship's Doctor."—Intense interest to-day centers about our gallant navy; and the recent daring exploits of our sailor heroes add new luster to the brave record of the past. Americans are proud to inscribe new names standing for heroic deeds—the names of Dewey, Hobson, and Powell.

Numerous are the current chronicles of sea warfare, danger

and death, there has been one void in the record of heroic deeds. Deep down in the bowels of the ship there is hidden in times of battle a phase of sea life which the world knows nothing, which has not been written of, and which artists have rarely seen or imagined. The beautiful brochure, entitled "The Ship's Doctor," which is being issued to physicians by The Arlington Chemical Co., of Yonkers, N. Y., is of unique interest. Nor is this interest due solely to the novelty of the subject; for, independently of this, the booklet is notable as marking the highest point yet reached in certain features of artistic bookmaking. The deadly battle horrows of the surgeon's merciful vocation are full of dramatic opportunities for the artist; but only an artist of power can make such gruesome scenes impressive instead of merely horrible. Mr. W. Granville Smith is such an artist, and he has made for "The Ship's Doctor" a series of battle pictures which touch the highest mark of the illustrator's art. A great naval battle is pepicted with thrilling realism, and the grim realities of war are uncovered by portrayals of the cock-pit during and action and of episodes of the surgeon's battle duties.

The beauty of this booklet, its professional interest and its timeliness, are tertain to make a lively call for it, and physicians who have not received a copy should at once send for it, as the edition is limited and will be issued in the order as requests are received. The more important pictures are admirable subjects for framing, and if there are received a number of requests sufficient to warrant the great expense, a series of plates in large size, with liberal margins suitable for framing, will be made and supplied free to physicians. Physicians who would like to have them for framing should make their requests to The Arlington Chemical Co., of Yonkers, N. Y., makers of Liquid Pepton-

OIDS, without loss of time.

Geo. W. Samuel, M. D.. Nashville, Tenn., says: I had a case of a man who had been drinking heavily for several days. I prescribed Celerina in tablespoon doses, every three hours, and in a short time he was in good shape again. I also used it in a case of neuralgia, in the following formula:

It acted like a charm. In a case of impotency, I used calomel in connection with CELERNIA, and the patient reports everything standing all right.

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Original Communications.

WAYNESVILLE, N. C., AS A HEALTH RESORT.*
By J. Howell Way, M. D., Waynesville, N. C.

THERE are propositions so very self-evident—facts so fully established to the satisfaction of all people—that to propose to demonstrate them seems a work of supererogation. One of these established facts, to my mind at least, is the acknowledged superiority of the climate of Western North Carolina in general, and of Haywood county and Waynesville town in particular. To assert and essay to prove this to you today is a proposition that impresses me as a ridiculous one.

A glance at our location, in the heart of these sun-kissed mountains, at an altitude of 2,786 feet, surrounded on every hand by protecting peaks, rising from a few hundred to more than 3,000 feet above the town; a surrounding country with yet more than six-sevenths of its surface covered with primitive forest, innumerable springs of purest water gushing forth from every hill and mountain side; rapid flowing streams, providing a perfect system of natural drainage; more than 300 sun-shiny days in a year; a temperature mild and equable—far enough to the north and with altitude sufficient to render it stimulating and bracing in winter without the disadvantages of a northern climate; far enough to the south to give it a moderate and healthful influence over the bodily functions without the depres-

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sion and lassitude induced by lower altitudes and latitudes; a summer climate with cool, refreshing nights and delightful days with noonday temperatures that rarely exceed 85 degrees, and an ever-present breeze filled with agreeable balsamic odors, is it to be wondered that I should in all professional candor and sincerity say to you that in my humble opinion Waynesville is the most healthful, the most delightful, the most charming mountain resort town to be found on the American continent?

What has been called the "germ theory" of disease has, in the light of recent scientific investigation, passed from the realm of theory into that of demonstrated facts, and, based upon our present knowledge, which, fragmentary and imperfect as it is in some respects, is sufficiently exact to make valuable deductions, sanitation has of late years developed into a science. From this standpoint climatology is invested with a new interest and value. A surgically clean wound means an aseptic The oft-quoted aphorism of Hippocrates, "Pure air, pure water, pure soil," signifies now a-days an air, a water, and a soil free from the infecting elements of disease, and this becomes, in the light of modern scientific investigation, the most important factor pertaining to a health resort under the name of climate, and I am well within the limits of scientific accuracy when I assert the fact that Waynesville is the center of a district possessing in a marked degree each of these healthful conditions.

Life possesses, as an inherent power, a vital, resisting property by which the individual is able to adapt himself to surroundings and to overcome deleterious influences. These powers or properties we designate by the expression "Laws of life," beyond the limits of which life ceases to exist as such. Thus heat, water, food, air, etc., must be provided in certain fixed minimum limits. Variations from the ideal standard which we call health lessen the resisting faculties and pave the way for the inroads of disease. Nature has fully prepared man with a defensive armor efficient to withstand the invisible foes with which he is ordinarily surrounded. An unbroken skin becomes a coat of mail, protecting the delicate structures of his body. The steady, ever-active surveilance of the delicate ciliated or hair-like processes standing out from the layers of cells lining

our breathing passages is ever certain to seize and to repel the invader, be it in the form of bacteria or atmospheric contami-Quite an elaborate investigation was undertaken only a few years ago by both the British and the American Medical Association, securing data for the comparison of the invasion of acute diseases with meteorological changes. Although the latter are largely x-factors in the problem, they have a much wider significance, since they make possible conditions not only devitalizing to the individual man, but favoring in many instances the growth of germ life. The tides and changes of the great atmospheric ocean in which we are submerged are of the greatest importance. Its weight, measured by the barometer, denotes the pressure our bodies sustain; the moisture in suspension, measured by the hygrometer, modifies its influence upon the individual; the variations of a temperature, measured by the thermometer, are of recognized importance. The atmosphere also varies in its composition; of which, from our present standpoint of consideration, oxygen and its allotropic form, ozone, may be regarded as the most significant, since these agents materially lessen the growth and development of all the microscopic forms of disease engendering plant life. The effects of a highly ozonized atmosphere, such as this climate possesses, are universally regarded as beneficial and healthful. Here deleterious compounds of ammonia, phosphorous, and sulphur are acted upon with great rapidity, and the odors resulting from organized decomposition are removed almost instantly. also probably equally destructive to all minute vegetable organisms, or forms of infusorial life. Hence the readily noted explanation of (what has been repeatedly noted by physicians who do surgical work in this section) why it is that grave surgical procedures with extensive tissue lesions heal more readily here in this climate, under other adverse conditions of personal environment, than do similar wounds in the elaborately and perfectly appointed hospitals of the larger cities,

An aseptic atmosphere is of the first importance in the selection of a climate for the benefit of sufferers from any class of diseases. For physical reasons, an elevated altitude, with its resultant meteorological and freedom from germ life conditions, is to be commended from the standpoint of those seeking environment most conducive to health. Too high elevations throw greatly increased labor upon the heart—over-stimulation; too low altitudes present in a greater degree the conditions more favorable to germ life, and probably with a less amount of ozone in the atmosphere, lowering the vascular and the nervous tone and tending to depress the vitality. In altitudes ranging from 2,000 to 4,000 there is exerted a stimulating effect on both circulation and respiration without the over-stimulation incident to the higher altitudes. There is also noted in this climate a gentle stimulation of the nervous forces, which is in many cases of chronic disease especially very beneficial. All cases of chronic disease (with notably few exceptions) requiring climatic change do well in our climate.

Malaria, in its many forms, is unknown here; hence this is an ideal resort for those desiring to escape from malarial infection, or to rid their systems of the deleterious effects of an uninterrupted protracted residence in a malarial district. The protean forms of tuberculosis, from which fully one sixth of the human race succumb, is practically an unknown disease among the native mountain population. Our climatic conditions are such that, world-wide as are its ravages, the tubercle bacillus or germ does not thrive, hence the practical immunity of the local native population from this dreaded affection. In a professional residence of more than twelve years, I may be permitted to add that I have yet to see the first patient affected with tubercular disease who came here with even a moderate store of vitality left to build upon, who was not benefitted.

Associated with most favorable and health producing environment, we have here in our midst, welling up from nature's occult laboratories, mineral springs of untold value in the therapeutics of disease. Chalybeate springs are found in every direction, and in the suburbs of town are situate the famous Haywood White Sulphur Springs. Of special value in the treatment of various acute and chronic diseases, appreciated most highly by both the local physicians and the laity, their medicinal virtues have proven them to compare most favorably with the more celebrated spas of both Europe and America.

But I am talking too much and too long of the purity of the air, the water, and the soil of Haywood and of Waynesville—I

am telling you that we have practically no infective disease germs here (and we have not!) But you editors are gentlemen learned and versed in art, high and otherwise; literature, polite and profane; trade, both free and for revenue; and everything else including science, hence you know, as well as I, that germs of some kind are to be found almost everywhere, and Waynesville is no exception. I will in conclusion deal frankly with you, and tell you of some of the infectious disease germs that disturb the placid equilibrium of Waynesville people. perhaps first on the list is the wool-gathering microbe which my friend and erstwhile patient, Editor Boone, has confessed to me afflicts him at times with its sportive incursions through his cerebral tissues producing a revulsion to thoughts of labor, mental and physical, and generally befuddling him. There may be other of our good citizens who at times suffer from the incursions of this wily microbe, but if so, its effects are usually manifested in a quiet and an unwritten way-at least the public prints do not get hold of the facts! The micrococcus oratoricus is another germ which from time to time has displayed much activity in infecting some of our people. You have already noted that our worthy and most highly esteemed mayor is suffering from an attack of this infusorial development; and this coupled with the seductive influences of the bacillus matrimonii, of which I am informed by a young lady of our town who is an expert in the occult mysteries of cardiac bacteriology and pathology, has given the mayor no little inconvenience of late. From the effects of both germs I prognose his future recovery and eventual development into a really useful citizen. The spirillum Americanum, which at last accounts abounded so plentifully in the blood of Fitzhugh Lee and Admiral Dewey has found with us a most congenial and peculiarly favorable soil for its growth.

Its effects are shown in a disposition to enlist under the American flag, to want to go to war, to fight foreign peoples—especially Spaniards, to add new lands to the already territorially cramped confines of the present domain of the United States, etc. When the records of the Spanish-American war are fully written and the fact is noted, as it will be, that from the little town of Waynesville, high in the mountains of North Carolina, a greater number of men in proportion to its population went

into the army than from any other town in the union, the activities of the spirillum Americanum will be fully appreciated.

Other germs are found here in Haywood, for instance, the bacillus democraticus, which impels persons affected by it to vote the straight democratic ticket always and under all circumstances—for further information as to its ravages, you, who are interested, are referred to the election returns from Old Haywood next November.

Inspiring the life-giving ozone-laden atmosphere enveloping our ideal mountain town, quaffing in copious draughts the health-restoring sulphur and chalybeate waters of our famous springs, freely partaking of the choice viands I am sure my friend Vaughan and his excellent coadjutors, will set frequently before you, and mingling though it be only for a few days with a people than whom a braver, more hospitable, generous or noble hearted never lived, I feel sure that we shall send each of you away with ruddier faces and quicker pulses—evangels for the healthfulness of Waynesville.

We welcome you most cordially to our beautiful skyland and gloriously-tinted skylines, to our lordly peaks and our lofty crags, to our mountain drives, our mountain trails and our "mountain dew," to our rippling rills, our babbling brooks, our shady vales and our story-telling glens—in short, gentlemen of the Press Convention, we are very glad to see you, and welcome you to everything in sight, and beg of you when you don't see what you want, ask for it.

A NEW OPERATIVE TREATMENT FOR HEMOR-RHOIDS, WITH REPORT OF A CASE.*

By George K. Sims, M.D., Chief of Clinic, Surgical Department, University College of Medicine, Richmond Virginia.

AVING made a careful study of the various operations that have been adopted for the radical cure of hemorrhoids, I find them all subject to various objections, viz., they leave a stump that must slough off, or an open wound that *Read before the Richmond Academy of Medicine and Surgery, April 26,

must heal by granulation. This, in a location like the rectum, which cannot possibly be kept aseptic for that length of time, must naturally be slow process, and, in addition to this, there is the possibility of serious systemic poisoning should these open wounds become infected with pathogenic microbes. Again, wounds that heal under suppuration leave a great amount of cicatrical tissue to contract and distort the organs.

The operation which I propose, if properly done, will to a great extent overcome these objections. It takes more time and care and is more difficult to perform, but the advantages gained by the patient more than compensate for the additional work. Of course, it may not be applicable to every case, but with suitable modifications it may be made applicable to the majority of cases of both internal and external piles, as well to polypi and other benign neoplasms of the rectum and anus.

Operation. - The patient should have a gentle mercurial purgative on the two evening previous to the day of operation and a saline each morning before breakfast. This will clean out the bowels and open up the portal circulation, so that we can give the rectum a long rest afterwards. The circum-anal region should be shaved and scrubbed clean and the rectum washed out with a large enema of warm soapsuds or carbolized water. A warm bath is given and clean linen put on. The anesthetic is now administered, after which he is placed in either the lithotomy or the Sims' position. Then introduce a speculum (Cook's and Mathews' are the best) and divulse the sphincters as widely as the instrument will distend them. Then with the thumbs. still further stretch until completely paralyzed. The piles will now present themselves, but not in their entirety; they should be everted as much as possible and the rectum and circum-anal region well irrigated with a 1 to 2000 mercuric chloride solution. The tumors, one by one, are row caught with four pronged forceps, pulled out and held by the assistant; then, with a sharp scalpel, the mucous membrane is cut through around the base of the pile and a silk ligature tied tightly (in the groove made by the incision), including only the blood-vessels and connective The pile is then cut off close to the ligature leaving only enough to hold it, and the cut edges of the mucosa are brought together over the stump with continued sutures of catgut. If the tumor is large, with a curved needle pass a double suture through its base and ligate it in two portions, then the mucous membrane is sutured as above.

If there are external piles present, also, the same method may be used to remove them. if large and vascular, or if due to a thrombus; but if they are small or are much indurated they may be simply cut off close to the skin, any bleeding points caught with forceps and ligated, the cut edges brought into close apposition, with interrupted sutures of silk. The field of operation is again irrigated with a hot bichloride of mercury solution, the parts dusted with iodoform or aristol, the mucosa pushed in well and small piece of iodoform gauze inserted, leaving the end protuding from the anus. A pad of gauze is placed over the anus, and over this a pad of absorbent cotton is bound firmly with a "T" bandage. A hypodermic injection of morphia, one-quarter grain, with atropia, 1 150 grain, is given and patient put to bed.

The bowels should not be moved for three or four days, by which time the wounds should be nearly healed; they should then be moved by salines and enemata. The advantages claimed for the operation are, that by leaving only closed wounds, made under antiseptic precautions, we lessen the risk of suppuration and perhaps more serious infection; that they heal in a much shorter time and with less pain and suffering; there is less danger of hemorrhage and of distortion, and perhaps neuralgia, of the rectum, from contraction of the cicatrical tissue.

In regard to external piles I wish to emphasize the advice given by Dr. Mathews in his admirable work on the rectum: "Remove all of the tumor, cutting it off close to the skin," instead of merely snipping off a small portion of it, as is advised by most authors. If small ones are left they are apt to become inflamed, and they, as well as the stumps left, tend to get much larger, often necessitating another operation to remove them.

The following case, which was a very severe and complicated one, will illustrate the success of the operation, although it was done under very unfavorable circumstances and surroundings:

W. C., aged thirty, had been suffering very much for some months with pains in the region of the anus and surrounding parts, especially during and after stools. They had got so severe that he had to take his bed, and could get no relief from the many remedies and treatment that he had received. examination I found a large and inflamed anal fissure, and about two thirds of the circumference of the anus was encircled by very large, indurated and ulcerated hemorrhoids. these conditions I did not examine the interior of the rectum, but advised an operation as the only means of getting relieved. To this he consented, but, being opposed to the hospital, as many are, I decided to operate at his house. After being prepared as above, chloroform was administered by Dr. Charles M. Edwards, he being my only assistant, except a man to hold his limbs out of the way. He was placed in the Sims' position, the sphincters thoroughly paralyzed by stretching, the mucous membrane everted, and the parts washed clean with a warm antiseptic solution. This revealed the presence of two medium-sized internal piles, which were caught with forceps and pulled out. The mucosa was cut through around the base of the pedicle and a silk ligature tied tightly in the groove made by this incision. The tumor was then cut off close to the ligature and the cut edges of the mucous membrane were brought into close apposition with a continuous suture of catgut, covering over the stump. The external piles being of the fibrous indurated variety, were simply trimmed off close to the skin without being clamped; several arteries were ligated and the cut edges brought together with interrupted sutures of silk. The parts were then sponged off with a hot mercuric chloride solution and a piece of iodoform gauze inserted into the anus with the end protruding. Another piece of gauze was then placed over the anus, covered by a pad of absorbent gauze, and the patient put to bed. A hypodermic of morphine and atropine was given to relieve pain. The bowels were moved on the fourth day by salines and enemata. He was out of bed in less than a week, and on the tenth day came to my office and I removed the stitches. All the wounds were healed nicely and he was feeling He returned to his work several days later, being completely cured, and has had no return of the trouble since.

SURGERY OF THE UTERUS AND ADNEXA PER VAGINAM.*

By WILLIAM H. WATHEN, A. M., M. D., LL. D.,
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THE author said, in part, that in a recent discussion upon suprapubic versus infrapubic surgery for diseases of the uterus and its adnexa, one of our Fellows is reported to have said: "Vaginal work leaves very little room for conservatism. The man who opens the abdomen from above sees what is present and knows whether he can conserve some of the organs."

Had this statement been made by some inexperienced surgeon, it would probably not have attracted my attention, for it is well known that when Doctors Segond, Pozzi, Richelot, etc., were renowned surgeons by the suprapubic method, they used similar expressions in opposition to the infrapubic work of Pean until they learned his methods, his technique and his results; but long before the death of this distinguished surgeon they fully endorsed all that he claimed.

The final conclusion as to the best methods of surgery in any disease must be the result of the combined experience of surgeons, and until there is practically a concensus of opinion, each individual must reach conclusions mainly from the results of his own work; hence I beg to differ from the opinion that sugery per vaginam is not conservative. In the discussion referred to another surgeon of broad experience is reported to have said: "Vaginal surgery is dirty from beginning to end." If the report is correct, then the surgeon does not conform to the aseptic and antiseptic requiremen s in surgery per vaginam that are usual in the practice of our best surgeons in pelvic operations per vaginam.

It is true that in celiotomy we may generally learn, from an examination of all diseased structures, what should and what should not be removed, but this is often based more upon the sense of touch than upon the sense of sight, for in many cases where diseased conditions in the pelvis cannot be removed with-

out endangering the life of the patient to a degree inconsistent with good surgery, they can be exposed only in a minor extent to the sense of sight.

But when we are uncertain whether the uterine adnexa should be removed, or just what should be done, because of our inability to detect any well-marked pathological lesions, there is incalculably more conservatism in examining the adnexa and pelvic structures through an opening into Douglas' pouch; this is an operation which is nearly devoid of danger, and every pelvic organ, including the uterus and broad ligaments, can be examined by the sense of touch with the finger in direct contact; if there be adhesions, they may be separated, the ovaries and tubes pulled into the vagina, treated if necessary, returned to their proper place, and the vaginal incision closed with cat gut.

While no careful surgeon would consent for these patients to get out of bed the second day after such an operation, this imprudence would probably not result in a single death. Certainly no one would suggest the probability of such results in suprapub'c explorations.

I cannot believe that it is often wise to open the abdomen for the purpose of making explorations of this kind, or for separating pelvic adhesions. It is the concensus of opinion that the Alexander operation is never indicated where there are pelvic adhesions that will not allow the womb to come to its proper place, although the adnexa be otherwise normal. This objection may be removed by vaginal incision and separation of the adhesions, and when the ligaments are drawn into the suprapubic wound the finger introduced into Douglas' pouch can detect if the uterus is in the proper place, and the degree of tension on the ligaments indicated.

When the operation is completed, the vaginal incision may be closed with cat gut, and no serious damage will have been inflicted. The same method, I assume, may be practiced where we prefer uniting the fundus of the uterus to the anterior abdominal wall; the adhesions, if there be any, having been separated, the uterus may be pressed firmly against the wall, and with the finger introduced through the vaginal opening the intestines and omentum pressed away from between the organ and the wall, so that in this position a suture may be introduced

through the entire thickness of the walls into the fundus of the uterus and tied externally with but little danger of wounding intestines or omentum.

Pelvic surgery is probably indicated in extrauterine pregnaucy before the end of the third month in a relatively greater number of cases than in any other form of disease. During the last three years I have operated per vaginam about twenty five times for extrauterine pregnancy, each operation being completed without complication, and there was no supsequent trouble. In most cases before rupture of the tube, no capital operation could be reduced to greater simplicity, or the dangers more completely removed, than the operation per vaginam; and if rupture has occurred into the broad ligament, or in intraperitoneal rupture, where there is no excessive hemorrhage, the mortality from the operation per vaginam would be practically While no one would contend that the vaginal method is preferable in intraperitoneal rupture with excessive intraabdominal hemorrhage, there are many cases where vaginal incision and clamping the bleeding tube may control the hemorrhage before shock is too profound for the abdominal method, or in profound shock may control hemorrhage until the patient may be, by stimulation and proper treatment, restored to a condition that will justify celiotomy. There are many cases where bleeding has been so profuse that shock is too great to admit of an immediate celiotomy, and while bleeding has ceased there is greater danger of secondary hemorrage and death as soon as we have stimulated the patient and refilled in a degree the blood vessels. In nearly all these cases a vaginal incision may be made without even an anesthetic, the tube caught and clamped and the danger of secondary hemorrhage averted; then we may prepare the patient by the best methods and at the proper time open the abdomen and treat the case successfully.

Vaginal incision without removal of the uterus, ovaries or tubes is often preferable to the suprapubic method in cases of accumulation of pus in the pelvis. In so-called "encysted peritonitis" where there is a large accumulation of pus surrounding the uterus, roofed in above by agglutination of intestines and omentum by inflammatory exudations, the patient may be cured by vaginal incision and drainage. The objection to this method,

because of our failure to separate omental and intestinal adhesions, is illogical, for these patients are relieved of nearly all symptoms by the operation, showing that continued adhesions do not cause trouble, the bowel having been evenly and regularly matted together so that gases and feces continue to pass uninterruptedly. Were these adhesions separated by the suprapubic method, the bowel would often be seriously injured, sometimes irreparably so. The danger of soiling the peritoneum with septic pus must be seriously considered; but, granting that infection is prevented, that the adhesions are all separated, without injury to any important structures, I venture the assertion that new adhesions will form and cause a more dangerous condition than in those cases where the adhesions were not disturbed in operations per vaginam.

In pelvic abscesses where pus is confined in one locality, vaginal incision and drainage is the correct treatment. In nearly all cases of pus tubes, the adhesions may be separated without injury to the bowel, the tubes brought down into the vagina and removed, leaving the uterus; but if both tubes are destroyed, or if there be extensive pelvic sinuses, then the uterus should also be removed, and this can be done more successfully, with less danger of injuring the bcwel, than by the suprapubic method.

This method was not so preferable until Segond demonstrated the superiority in operating for such conditions by bisecting the uterus. After incising and separating the vagina from the uterus, we can easily push off the bladder and make an opening into Douglas' pouch without injuring any important structures; and when the uterine arteries and lower part of the broad ligaments have been clamped, the uterus may be bisected, even before the adhesions of the tubes and ovaries have been touched. Each side of the uterus may then be pulled down and adhesions separated as they present themselves; and by this technique we see more of the tissues with which we are dealing than we do in similar cases operated upon by the suprapubic method where we must judge absolutely by the sense of touch as to what structures we are separating deep down in the pelvis.

I have never understood why some celiotomists persist that there is such great danger of wounding the bowel in operating While myomectomy must be encouraged wherever the operation can be successfully performed, we can never know that this can be done until we have examined the tumor by the sense of touch, which can be done in small myomata through the vaginal incision as accurately as through the abdominal incision, and then if the tumors can be cleated and the uterus saved, they may be removed more, successfully per vaginam by morcellation. Or if the great difficulty is encountered in morcellation, the vaginal aving bath legarated, the bladder dissect ed from the uterus, the uterine arteries controlled, the operation can then be completed quickly by opening the abdomen. In myomata too large for mercellation complete the operation more rapidly, and my results are better, by the combined vagino-abdominal method.

Where drainage is indicated, it is more successful per vaginam, and no one can appreciate the superiority of this method over abdominal drainage until he has had extensive experience in vaginal work.

In my earlier celiotomy work I irrigated and drained in many cases, in similar cases I now seldom do either, and my patients convalesce more satisfactorily. It is nearly impossible to drain for any considerable time through the abdomen by either gauze or glass or gum tubes without causing extensive adhesions, and often persistent sinuses leading down to an infected ligature.

I must positively take issue with the statement that sinuses are more frequent following vaginal work. Judging from my own operations and from numerous cases of sinuses I have seen in the practice of other abdominal surgeons, I am forced to the conclusion that there are relatively ten cases of sinuses following the suprapubic method where there is one following vaginal work. If vaginal operations are correctly performed, and sutures not used, there is seldom a case in which there is any excuse for a permanent sinus. I had a few sinuses in my earlier vaginal work, but my results are different now.

Vaginal incision and drainage as a preventive against further extension in uterine infection following labor or abortion was probably first suggested by Dr. Henrotin and myself at the meeting of the American Gynecological Society in Baltimore in 1895, at which time papers were read by us and Dr. Charles Jacobs, of Brussels, discussing all kinds of surgery of the uterus and adnexa per vaginam. What was then theory is now demonstrated by fact, and we know that incision and drainage at the beginning of such infection, before structures outside the uterus are extensively involved, does often prevent pelvic suppuration, or systemic infection by absorption of toxines of germs of suppuration. To be successful incision must not be delayed.

The only argument in favor of suprapubic hysterectomy for removal of a malignant uterus, is that infected tissues outside the uterus may then be removed, and the operation made more thorough by ligating the arteries at the internal iliac and dissecting out infected pelvic glands. This operation cannot be performed except by a thoroughly trained surgeon, and then may require nearly two hours for its performance. A little experience will show that this method is not justifiable for the disease will return so soon that the patient would probably have lived as long or longer had the uterus not been removed.

Time will prove that no cancerous uterus should be removed where the disease has involved tissues outside the uterus, and in nearly all these cases the operation per vaginam is preferable, and the immediate and subsequent mortality not so great. The immediate mortality should be practically nil, and recurrences may be less frequent if we will curette the uterus and use the galvano-cautery a week before hysterectomy and again at time of the hysterectomy.

As it may be that the ovaries serve a purpose similar to the ductless glands, it might be well not to remove them in an operation per vaginar where they are not so diseased as to endanger the health or life of the woman.

In conclusion the author referred to simplicity of technique in operative work per vaginam: Where we do not perform hysterectomy the work may be more successfully and more rapidly done by using no speculum or retractor save the fingers, and in hysterectomy retractors are seldom indicated, and I have re-

moved large myomata without using any. It might probably be better in morcellation to use a broad retractor in front to better protect the bladder and ureters.

I have been especially impressed with the simplicity and rapidity of the operation for lacerated cervix by using no retractors or specula, and uniting the raw surfaces with a continuous suture of cat gut. The operation by this means may be completed in bilateral larceration within ten minutes, and the result will be nearly perfect in every case. I believe these patients would not suffer any serious injury, and most of the operations would be successful, were they allowed to get out of bed on the second day.

Selected Papers.

SHOULD ALL MILK USED FOR INFANT FEEDING BE HEATED FOR THE PURPOSE OF KILLING GERMS?

IF SO, AT WHAT TEMPERATURE AND HOW LONG CONTINUED?*

By Rowland Godfrer Freeman, M. D., Pathologist to the Foundling Hospital; Pathologist to St. Mary's Free Hospital for Children, New York.

LTHOUGH in this paper I will present no new facts, I hope to be able to make my remarks interesting by presenting to you a summary of the answers I have received to the questions I sent to the members of the Society relating to the heating of milk for the destruction of germs. I wish also to express my thanks to the members of the Society for their very courteous co-operation, which has made it possible to present this summary of the opinions of many of the most prominent pediatrists of the country. The questions I sent out were rather hurriedly drawn up and were not perhaps as definite in their meaning as they should have been, but in general the answers received gave evidence that they were understood as was intended.

^{*}Read before the American Pediatric Society, Cincinnati, June 2, 1898.

I have received 37 answers, of which 34 were categorical and 3 in the form of letters. One of these letters gave details of a process used by the writer in which the milk is twice boiled, while two letters gave no details and were thus not suitable for this purpose.

in answer to the first question, "Do you consider that milk is rendered more digestible by sterilization or pasteurization?" the answers were: Yes, 3; a qualified yes, 1; no, 19; a qualified no, 4; while three thought it less digestible when sterilized and four more digestible when pasteurized. The great majority then consider that heating does not render the milk more digestible.

In answer to the second question, "Is sterilization or pasteurization to be advised for this purpose?" the answers are as follows: Yes, 1; qualified yes, 1; no, 21; qualified no, 1; pasteurization, 5.

The third question, "Would you recommend that milk should always be heated for this purpose?" was answered as follows: Yes, 3; qualified yes, 4; no, 25; qualified no, 1. It is thus evident that a very large proportion of these gentlemen believe that milk may be fed raw under certain conditions.

The fourth question, "If not always, when, if ever, is it imperative?" The answers may in general be grouped as follows: Always, 1 when not kept cold, or in summer, 17; in gastric or enteric disorders, 4; when dairy hygiene is questionable, 12; during epidemics of scarlet fever, measles, cholera, or typhoid fever, 1; when milk is old, 3; in cities, 7.

The fifth question, "Do you prefer pasteurization or sterilization?" brought the following answers: Pasteurization, 23; pasteurization under certain circumstances, 6; sterilization, 1. Including the latter mentioned before, we would have 2 preferring sterilization; one prefers pasteurization in private practice and sterilization in hospital work.

As to the temperature for pasteurization: 1, uses 140° for 15 minutes; 1, 150° for 30 minutes; 2, 155° for 30 minutes; 1, 150-158° for 15 minutes; 3, 155-163° for 15-30 minutes; 1, 160° for 20 minutes; 1, 160-167° for 20-30 minutes; 1, 160-170° for 35 minutes; 1, 160-177° for 20-30 minutes; 1, 160 170° for 35 minutes; 1, 165° for 35 minutes; 18, 167°, for intervals ranging from

6 to 35 minutes, the majority being from 20 to 30 minutes; 1, according to Walker-Gorden method.

The question concerning the duration of sterilization was answered by only 13 members, the time varying from 15 minutes to 1½ hours.

The last question, "Are there any practical disadvantages in heating milk for sterilization?" brought forth a variety of answers, as follows: Yes, 2; no, 2; less digestible, 7; sterilized milk less digestible, 3; less nourishing, 6; possibly a contributing factor in scurvy, 8; objectionable taste, 4; objectionable odor, 1; change in color of milk, 1; destroys emulsion, 1; cream not evenly mixed, 1; constipating 2; household sterilization unsatisfactory, 1.

These replies seem to show a remarkable unanimity of opinion of the members of the Society, throughout the country the predominating opinion being that raw milk would be the best food were it possible to obtain it clean, while a considerable number are evidently willing to take their chances with raw milk during certain seasons of the year and under certain conditions of dairy hygiene.

It was, therefore, surprising to me that more of the members had not made use of pasteurization at a temperature lower than 167° F. There seems ample evidence that 155° F. for 30 minutes (a temperature exposure which does not change the taste of milk) is sufficient, but only six of all the replies advocate this temperature. One answer, which coincides very nearly with my views, comes from Dr. Victor C. Vaughn of the University of Michigan, whose authority in such matters is widely recognized. This I will take the liberty to present in full:

"DEAR SIR:—I will answer your questions as follows:

- 1. I do not think that milk is rendered more digestible by sterilization or pasteurization.
- 2. Sterilization or pasteurization is not advised for the purpose of rendering milk more digestible.
- 3. If milk could be obtained from healthy animals under complete aseptic precautions, I do not think it would be necessary or desirable to have it heated before feeding it to the children.
- 4. Practically, sterilization or pasteurization is imperative because milk is not obtained at all times from healthy cows, and very rarely, if ever, under aseptic precautions.

- 5. I prefer pasteurization to sterilization. Pasteurization should be carried out at a temperature of 155-158° F. When milk is heated to 160° F., it is so changed that a marked difference in taste is produced.
- 6. I think that a temperature of 155-158° F. maintained for fifteen minutes, is sufficiently active to kill toxicogenic germs that may be present, provided that the milk, after having been heated, be kept in a very low temperature. The keeping of milk at a low temperature after heating and before it is fed to the child, is, I think, absolutely necessary, because we know that even boiling does not destroy the spores of certain harmful germs in milk; but these spores develop at a low temperature, and there is reason for believing that these germs do not develop in the body.
- 7. If milk is sterilized, I think fifteen minutes long enough time.
- 8. There are practical disadvantages in heating milk for sterilization. Some of the practical disadvantages are inherent and others are accidental and avoidable."

It does seem to me that our dairy hygiene even under the best circumstances, has reached a point where it can produce a raw milk which is an absolutely safe food. Cow's milk must be obtained by pressure on the teats of a cow, and these teats hang beneath an udder which is covered with hair, and from the belley of the cow which is also covered with the same haircovered hide. Moreover, this portion of the cow is particularly liable to be soiled with dirt as it comes in contact with the ground when the cow lies down. Its hairy covering, moreover, holds the dirt, which is gradually shaken out by friction. the cow has loose fecal movements these run down the inner surface of the thighs and the posterior portion of the udder. The contamination dries on the udder in the air, and during milking is apt to fall as dust into the pail. Moreover, the milk ducts of the cow may contain many bacteria, although usually contamination from this source is not great. In some cases, however, it is considerable, and then it is not always eliminated by throwing away the milk from the first few squeezes of the teat. have found it present in the milk forced out by even the fortieth Milk thus may become contaminated in the milk squeeze.

ducts, and at any rate has to be obtained from a bad immediate environment. Many efforts are being made to minimize these dangers, but with the best methods now used they still exist to a considerable extent.

But this is not all. The milkman's hands are almost never clean and of necessity hardly can be. The milkman must labor hard with his hands all day, causing a thick, rough callous which is difficult to clean, if an effort to clean them is made. His hands are employed in handling manure, and in attending to many duties involving contamination. Occasionally they are used during the day in waiting on some one sick with a contagious disease, and when such is the case the consumers of the milk are apt to suffer. If wet milking is used, the milkman's hands are practically washed over the milk pail.

We have here again in the milkman a danger to the milk which cannot yet be eliminated, and even with great care on the part of dairy superintendent it will be difficult to entirely do away with these dangers.

Epidemics due to milk have originated from a mild unrecognized case of typhoid in a milkman, also from a beginning diphtheria in a milkman. Such sources of danger may exist in very carefully conducted daries, although the liability to them is much diminished.

It has seemed to me worth while to go over these dangers to milk and to consider the difficulties in eliminating them in connection with the matter of heating milk, to show how difficult this problem of obtaining clean milk really is.

The original contamination of milk up to the time of bottling in well-conducted daries where great efforts are made to obtain clean milk, rarely amounts to less than five thousand bacteria in each c. c. By the time such milk reaches the consumer, the contamination is still greater, and if, as is usual, the milk is used during the twenty-four hours following delivery, is apt to be very considerable before a fresh supply arrives, and is probably as a rule something between fifty thousand and five millions a c. c., or is roughly between three thousand and three hundred thousand a drop. These bacteria are for the most part air bacteria, but they may be putrefactive bacteria, or toxin producing bacteria, or pathogenic bacteria, and thus may produce in the

infant that is fed on the milk a gastro enteritis or acute poisoning, or the infectious disease of which the special organism present is the cause. Many instances representing each of these classes of illness due to milk have been reported.

Does it seem right in view of what we know of the bacteriology of mother's milk to give such contaminated milk raw to infants?

It has seemed to me that although fresh uncooked milk is the ideal and rational form for infant feeding, the practical impossibility of obtaining cow's milk clean has rendered some form of sterilization necessary. It does not seem fair to put into an infant's stomach a food containing thousands of bacteria in each drop, these bacteria being of unknown quality and very possibly of dangerous and pathogenic nature.

For the present then some sort of sterilization, it seems to me, High temperature sterilization causes certain must be used. chemical changes in milk. The change in the taste of milk oc curs at 70° C. (158° F.) and the changes found by chemists begin with a temperature of about 80° C. (176° F.) Clinically it has been observed that children fed on milk heated to a boiling temperature do not thrive as those fed on raw milk, and also that this bottled food seems to be a predisposing cause of scurvy. On this account then it would seem that the lowest temperature which is efficient should be used for sterilizing. Moreover, a lower temperature continued for a long time is as sufficient in its bactericidal action as a much higher temperature for a very short period. We should then use a temperature for heating which is the lowest which, when continued for a considerable time, will destroy with certainty all those pathogenic bacteria most feared in milk, as well as the bulk of the bacteria present.

As I stated before this Society two years ago, I believe that on the considerations just mentioned, 68° C. (155° F.) for thirty minutes, followed by rapid cooling, is the best temperature exposure. Such a temperature will destroy the germs of diphtheria, typhoid fever and tuberculosis, and so many of the other germs present that a plate planted from milk so treated and kept at a laboratory temperature will usually show no growth in twenty-four hours. At the same time this milk has not been heated sufficiently to give it a "cooked milk" taste or to change its taste at all, and the temperature to which it has been exposed is more

than ten degrees centigrade below that at which the chemical changes in milk due to heating are said to take place. It is, however, evident that pasteurization at this temperature has been as yet but little used. I would urge on those gentlemen who have used a temperature of about 167° F. and who are inclined to favor raw milk, to try first pasteurization at this lower temperature. In using this temperature, care must be exercised that approximately this temperature is sustained for half an hour, and equally that the milk is immediately and rapidly cooled and kept cool. Raw milk, I believe, cannot yet be considered a safe tood.

205 West Fifty-seventh Streeet.

—Archives of Pediatrics.

THE Possibilities of Antitoxin.—A statement was made by one of the speakers at the recent Sanitary Convention in Detroit that the use of antitoxine has established an expectancy of from 13-14 per cent, as a death rate in diphtheria instead of the old time rate of 30 per cent, and over without its use. This statement calls for a criticism from Dr. George Suttie, who in the Louisville Medical Monthly of recent date recites his experience in the Contagious Department of Harper Hospital, of Detroit, where he has watched its administration from the beginning. In the early months a serum of foreign make was used, 44 cases being treated with a mortality of 4. Afterward the American product, manufactured by Parke, Davis & Co., was used and proved more satisfactory than the former. With this 24 cases were treated, 4 requiring tracheotomy, with a mortality on only 1. After this free distribution of antitoxine was made by the Board of Health to those who were not able to pay for it, and to the various hospitals where patients were sent by the Board of Health. The number of patients treated for the year ending February, 1897, were 374 with antitoxin, the death rate being 12. 56 per cert.; and 467 without antitoxin, the death rate being 34. 90 per cent. From March 1st to December, 1897 there were treated with antitoxin 305 cases, with 32 deaths,; and 632 cases without antitoxin with 192 deaths, representing 10.49 and 30.39 per cent. respectively. The Board of Health used the prepation of Mess. Parke, Davis & Co., entirely. Continued experience goes to show that with the advantage of the early use of antitoxin being recognized both by the public and the profession

there is a steady improvement in the results obtained.

NORTH CAROLINA MEDICAL JOURNAL.

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Editorial.

VALUE TO THE PUBLIC OF STATE MEDICAL SO-CIETIES.

This is the subject selected by Dr. George Ben. Johnston, for his Presidential Address before the Medical Society of Virginia, at its last meeting. He alludes to the disposition on the part of the public to regard medical societies in the light of trades' unions or social organizations, where scientific work is only an incident. He refutes this and gives as the object of medical societies the advancement of science, the promotion of philanthropy and the fostering of good fellowship. The last of these propositions needs no further proof than may be obtained from

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observation at any society meeting. As proof of the first he has gathered by correspondence with the officers of the different State societies that their membership is nearly 25,000, that the scientific papers read at the annual meetings and discussed make, when published, about 20,000 pages, and that these papers are scattered through the circulation of medical journals among thousands of readers beyond the confines of the State from which they emanate. They are all listed moreover, in the *Index Medicus*, so that they may be readily accessible to students who are working along certain lines.

Greater stress is laid upon the fact that the very salutary laws regarding the practice of medicine, that are to be found upon the statute books of nearly all the states today, are the direct result of the thought and presistent effort of the medical societies. These laws are having the effect of driving out from those states which are so protected ignorant quacks and pretenders whose whole aim is to prey upon the credulity of the people, who had come to believe that "all doctors know their business," as the writer had one to remark to him only a few days since. These laws enacted by the states have required the medical schools to advance their standards and methods of education, so that the people are given today a class of physicians far more thoroughly prepared, on the average, than was the case twenty years ago.

In regard to the health laws which result in almost all cases from the direct effort of the medical societies, the author says they "have invariably been for the protection of our neighbors and never in any way such as would result in personal or professional gain to us. It would be well for us to make the people understand that these laws are for their own protection, that there can be no financial gain to the physician to prevent disease when he makes his very living through the existence of disease. The doctor has his own family to consider and it is for their protection as well as that of the general public that he desires to see unsanitary conditions removed and epidemics of contagious disease prevented. Having studied these matters and having his whole time taken up in their consideration, he feels that he is in a position to advise, and that his advice should carry weight. Then the doctor knows that when an epidemic makes its ap-

pearance, though all others flee, he must remain and face the foe, that he cannot expect to receive any suitable remuneration for his services in these distressing times, for those who would be able to pay him, would have flown to places of safety, leaving only the poor and the doctor to entertain the unwelcome visitor. No, neither laws to keep out quacks and pretenders nor those designed to improve the general health are designed to be of especial benefit to the medical profession, but to promote the general welfare of the people whose time is so thoroughly taken up with other things that they have no time to educate themselves in these matters. And it is only through the organized efforts of state medical societies that these laws are enacted, therefore these organizations should have the endorsement of the laity as well as the earnest support of the profession.

Reviews and Book Potices.

Yellow Fever.—Clinical Notes by Just Touatre, M. D., (Paris): Former Physician-in-chief of the French Society Hospital, New Orleans; Member of the Board of Experts, Louisiana State Board of Health. Translated from the French by Charles Chassaignac, M. D., President of the New Orleans Polyclinic; Editor New Orleans Medical and Surgical Journal. Octavo, cloth, 206 pages. New Orleans Medical and Surgical Journal, Ltd., New Orleans, La., 1898.

The translator explains that while this work is a translation from the French, the translation was from the manuscript and not from a former edition of the work. This is the first edition. The author preferred to write in French.

The work is the most satisfactory exposition of this malady that it has been our fortune to meet. The main object of the author is to bring out the importance of Faget's law of the lack of correlation between the temperature and the pulse-rate in yellow fever. He says "the symptom which alone best characterizes yellow fever, and which has been observed in New Orleans ninety-nine times in a hundred, and which is not found at the outset of any other febrile affection, is the PROGRESSIVE FALL OF THE PULSE RATE." "Notwithstanding slight variations, the progressive fall of the pulse in yellow fever is, during the first

seventy-two hours, an almost absolutely pathognomic law." Forty charts are presented from the author's own experience which seem to prove the correctness of his claim. In mild cases there is always a fall in the pulse rate during the first two or three days, even though these may be no fall in the temperature. However, should there be even a rise in the temperature, the pulse will not rise, though it may remain stationary for twelve or twenty four hours.

Great stress is laid upon the importance of early diagnosis both for hygienic reasons and for the reason that it is during the first two or three days that the physician can render the patient the greatest service in the way of treatment. In regard to the ease and certainty of diagnosis he says "I know of no febrile infectious disease in which the physician can within the first twenty-four hours, after several examinations of the patient and his symptoms, and of the pulse and the temperature, be so usefully and completely enlightened as he can be in yellow fever."

The prognosis depends on the nature of the epidemic, the various epidemics in New Orleans having a mortality ranging from 85 per cent. in that of 1853 to 5 per cent. in that of 1897. The author places the death rate in 1897 as 1 for every 200 patients, but his figures show it to be t to 20 patients, thus making the death rate 5 instead of ½ per cent. Special attention is given to the diagnosis from dengue, and it is shown that there should be little difficulty in distinguishing between them if one is acquainted with both diseases.

The whole subject is treated very carefully, and the book should be in the hands of all physicians resident in those sections where the disease may occur.

Johns Hopkins Hospital Reports.—Report on Gynecology. Quarto pages 136. The Johns Hopkins Press, Baltimore, 1898.

This volume contains an interesting article on The Etiology and Structure of True Vaginal Cysts from the pen of Dr. James Ernest Stokes. The main portion of the work, however, is taken up with a paper from Dr. J. G. Clark, Resident Gynecologist in the Johns Hopkins Hospital, being "A Critical Review of Seventeen Hundred Cases of Abdominal Section from the Standpoint of Intraperitoneal Drainage." In this paper the author proposes to prove "that not only is drainage valueless in the great ma-

jority of cases in which it has hitherto been used, and is still used by some surgeons and gynecologists, but that it is frequently productive of harm." The views of the author have been made known already through the medical press, but in this report he has gone very thoroughly into the history of drainage, as it has been practiced by surgeons generally, and as it has been practiced in Johns Hopkins Hospital; he has studied the structure and function of the peritoneum under normal conditions with its method of disposing of irritant and infectious matter; and he has brought to bear a long series of cases the result of which go to uphold his opinion. Among the enumerated objections to drainage are the traumatic and chemical irritation produced, the retardation of healing, its non-effectiveness in removing fluids and infectious matter, and the liability to infection through the drainage tract.

The author enumerates the following conditions in which drainage may be indicated: (1)—In appendicitis, under certain circumstances; (2) In localized collections of pus in the pelvis; "these cases are, par excellence, the ones for incision and drainage through the vagina. (3) In suture of the intestine, where there is doubt as to the integrity of the suturing. (4) After excision of fistulous tracts. (5) In purulent peritonitis. For drainage through the abdomen the author prefers one or more pieces of plain steril gauze, doubled back and forth like the folds of a fan, and packed from the site of the operation to the surface. It should be lightly withdrawn and cut off as soon as the external end becomes dry.

In conclusion there is a detailed report of twenty cases in which the author's method of postural drainage was used. These cases make a very interesting study.

Therapeutic Bints.

NEW METHOD OF VACCINATION.—Dr. M. B. Hutchins in the Journal of the American Medical Association has this to say in regard to a new and painless method of vaccination:

The point to be vaccinated is cleansed. A piece of cotton as large as the desired denudation is wet with liquor potassæ and

laid on, or a little of the fluid is put on with the bottle stopper. After two or three minutes, or as soon as slight burning is felt—it usually does not burn at all—the cotton is removed, if it was used, and the soap-mixture which has formed with the skin secretions is wiped off with a piece of wet cotton, though this is not essential to success, in order to render the next step easier. Then an ink eraser, a toothpick of soft wood, a pencil rubber, a a piece of gauze (the quickest) or a piece of damp cotton is used to rub away the softened epidermis. The friction is slight, the pain is only a little stinging when the sensory nerve filaments become exposed. We obtain in a few seconds a moist, shining surface, often a clear view of the papillary vessels, but no bleeding. The vaccine is now applied in the usual way.

The advantages of this method are its practical painlessness and the absence of terrifying instruments, such as the "Neptune's trident," the lancet, or sewing needle. Further, bleeding is a bar to successful inoculation. By scarification it is difficult to stop short of bleeding while with denudation bleeding is almost impossible. A little girl aged six years vaccinated herself by this method. There is also less danger of an undesired infection from instrument or epidermis when this method is employed.

As to the results: A good lymph will "take;" an unreliable one will not. Inoculation was successful in as many cases vaccinated by denudation as by scarification.—Medical Age.

RHEUMATISM.—Oil of Wintergreen may be administered in rheumatism in the following manner:

B. Oil Gaultheria, 3 iv.

Alcoholis, qs.

Syr. Simplex, qs. ad., 3 iv., M.

Sig.: One teaspoonful, in vichy, three times a day.

This makes a most palatable as well as refreshing dose, the patient often considering it a home-made root beer, while the vichy has well as the oil is a valuable remedy.—Journal of Practice.

COLD SPONGING VERSUS COLD BATH.—Dr. H. A. Hare (Thera-peutic Gazette, March 15th) affirms that he has used cold sponging in his hospital practice and rarely the bath, with the most

satisfactory results. He suggests the following rules of treatment: 1. In early typhoid, with constipation or moderate diarrhæa, give a full dose of calomel in divided doses, in order to stimulate the liver and antisepticize the bowel with Lile. 2. Control the fever when it reaches 102° F. by sponging. patient being stripped and laid on a rubber sheet or blanket over a sheet, he is to be sponged with water adapted in its temperature to his needs, and it is to be remembered that the rapid application of a low temperature is more refreshing than the prolonged application of a higher temperature (Baruch). The chief advantage of the cold sponge lies in the shock and reaction. This is better obtained by the use of ice sponging than by the The patient's surface is always red in ice sponging, often blue in the bath, and that the fever is not the chief danger in the case renders the fact that as great a reduction from the sponge is not reached as from the bath of little importance except in hyperpyrexia. Shattuck tells us that he has found no marked or constant difference in the antipyretic value of cold sponging at 60° F. for twenty minutes, the cold pack at 60° F. for sixty minutes, or the cold bath at 70° F. for ten or fifteen minutes. Finally, if this does not bring the temperature down to 100.5° or 101° F. in twenty minutes, resort should be had to the tub. It is essential when the sponging is used that more water be applied to the back than to the trunk of the body, for at the back the great muscles and thick skin retain the heat as a reservoir, and are not cooled if only the front of the body is sponged. Further, the posterior surfaces are the ones apt to be congested and sore, from the dorsal decubitus, and therefore need the stimulating effect of the bath, as do the kidneys and other deeply situated organs. That this treatment is of value is shown by the marked redness of the skin, the improvement of the circulation and respiration, and the cleared mind. 3. It is advisable not only to use friction in a light form, but to use moderately active massage, with the same objects in view as when the rest cure is undertaken, for the proper treatment of typhoid is a modified rest cure. The writer is firmly convinced that by this means bedsores, local congestions and effusions, ædematous swellings, peripheral nerve pains, and muscular feebleness will be largely decreased, and Pospischl has shown that mechanical irritation of the skin is capable of increasing heat loss ninety-five per cent. 4. In nearly all cases give more nourishment than the average typhoid patient in the past has usually had. With the exception of broths and meats, almost any article easy of digestion should be allowed—as one or two or more lightly boiled eggs, corn starch, arrowroot, etc. 5. Use stimulants in carefully graduated doses whenever the circulation needs them, particularly alcohol. Even the cold-bath enthusiasts give whiskey to overcome the depression they often produce.—Medical Record.

Reviews of Current Literature.

GENERAL SURGERY.

H. T. Bahnson, M. D., R. L. Gibbon, M. D., J. Howell Way, M. D.

"SOME LITTLE POINTS IN SURGERY" is the title of a most instructive paper especially to the general practitioner by Dr. E. B. Smile of Detroit, (Jour. Amer. Med. Association, May 7, 1898), from which we quote in extenso:

"I am quite sure you will all agree with me that the little points in the practice of our profession are of pre-eminent importance. Of themselves, they are able to make or mar our success, according to our attion to or neglect of them.

In an injury to the head we must take into consideration every minute point, weigh each well and proceed as our best judgment dictates. If we suspect fracture of the skull we should examine the ears, and if a discharge is present, its nature should be noted, for on this—whether it be blood, the cerebro-spinal fluid or a mixture of them—will depend our diagnosis and prognosis to a large extent. The pharyngeal space and posterior nares should not be overlooked, and lately, every surgeon should be conversant with the use of the ophthalmoscope and be able, roughly, to determine some of the more commonly occurring pathologic conditions of the fundus of the eye, such as choked disk, neuritis, hemorrhage, detachment of retina, and albuminuric retinitis, which conditions are liable to occur in cerebral apoplexy, meningitis, brain tumors, Bright's disease, and injuries to the head.

In all injuries about the body the positive, brilliant diagnosis is

made by considering every little point; for example a man has been crushed between two heavy bodies and the head of the femur is thought to be involved. Everything that bears upon the question must be fully considered, and it will be found that the simple, plain little points will reveal the certain diagnosis. The position of the limb here, as in almost all fractures of the long bones, will indicate to the experienced surgeon, almost at a glance, just what the condition is. Yet it is well to fully corroborate the testimony of the eyesight with every means of evidence available. The result will then be safe.

In compound fractures a little point of importance is to make the right traction so as to fully reduce the fracture and yet produce as little secondary injury to the parts as possible, especially to the nerves and blood vessels. More than once I have hooked my little finger, rendered as thoroughly aseptic as possible, between the bones and soft tissues and used just enough traction to push the fractured end of the bone back into its original position. Again, it is a nice little point to know just how to cleanse and remove all debris from the wound. I always carry, both in my dressing and my surgical case proper, some fine rubber tubing. This can be made quite aseptic in a few minutes and an extemporaneous syphon made in as short a time A sterile. neutral, alkalin or antiseptic solution can be prepared while the injured parts are being uncovered. I then apply to the wound my rubber tubing syphon, in one end of which a glass nozzle is fitted, in such a way that the inflow of water will drive out and not wash in the foreign material. In applying dressings it is a nice little point which comes only with practice to know just how snugly to draw them so as not only to hold the parts in position but give the patient perfect rest without pain. When the injury to the limb is below the middle third it is a good plan to pad the distal end well and begin the application of the bandage close to the extremity, bandaging somewhat firmly here, and as the bandage goes nearer and nearer to the wound making it slacker and slacker until the injured tissue is reached, when the bandage ought to be drawn only snug enough to simply hold the dressings firmly in place. I think the tendency is to apply too much dressing to stumps after amputations, and to extensive injury of soft tissues. I apply just as little as is consistent with the requirements of the case. When the patient is at home, with good atmosphere and sanitary surroundings, I am still more careful to apply as little dressing as possible.

In compound comminuted fractures the question is how many of the small fragments of bone to remove and how many or what to leave. It is good practice after having thoroughly cleansed the site of injury, to leave the cancellous pieces near uninjured cancellous bone, and to leave in place all peripheral portions which are attached to the periosteum, and thus if possible make the contour of the bone almost if not quite normal. One of the recognized procedures of modern surgery, when we have an extensive wound, be it operative or from acci-

dent, is to cleanse it with some substance that is as non-irritating as possible. The strong irritative solution of mercury bichloride of the earlier practice in aseptic and antiseptic surgery is practically a thing of the past. For a thoroughly reliable antiseptic solution for irrigating wounds which are infected, I am in the habit of using 2 c.c each of carbolic acid and tincture of iodin to a liter of sterilized water; I then rewash with sterilized water. Simple sterilized water, or sterilized normal saline solution makes an ideal cleansing fluid when we have no reason to suspect infection. For a dry dressing I use sodium chlorid and starch, in proportion of 1 to 4.

When called upon to go hastily to some remote house where an operation of some kind is found imperative. alone and partially unprepared, I usually proceed in the following manner: While my instruments are boiling in a soda solution on the kitchen stove, I prepare the patient. I then appoint three nurses if they can be obtained in the house or from the neighbors. One I assign to the anesthetic; the other two I make head-nurse and assistant, respectively. I then clean my hands, nails and arms, and instruct both nurses to do the same in every detail. I then say to them, "Do not touch anything with your hands or arms except as I direct." I then prepare my needles, dressings and instruments, placing all in a place convenient for picking up as needed; the assistant nurse handles the boxes, the jars and the pans only; the head-nurse may, if necessary, thread needles, cut gauze into convenient strips for sponges and assist me generally; I then put the patient under chloroform, give the inhaler to the nurse I have appointed for this duty, sterilize my hands again and then proceed with the operation.

In repairing the soft tissues, like structure should be brought into apposition with like, severed tendon to tendon, nerve end to nerve end, etc. To do this thoroughly, neatly and well, without too great tension, requires not only a delicate touch, but a firm, steady hand which experience alone will bring. To my young friends who are just entering the field of surgery I would say, "Perform operations on the cadaver, on the dog, the rabit, anything you can get hold of. Do all kinds of work again and again until you feel that you are master of the situation, then when called upon to care for some unfortunate human being, you can enter the room of the injured or afflicted one with a confidence born of the certainty of success."

Do not use too heavy ligatures nor too large sutures. I wish to urge this very strongly. In my opinion the experienced surgeon can ligate vessels with a comparatively fine silk thread without running the slightest risk of cutting through the vessel; then with a well and tied knot he can cut the ends quite close; and so too intying off stumps. The point I wish to bring out is that the smaller the foreign substance which we leave in a wound or cavity the less liable we are to have trouble and irritation. In suturing an external wound it is well to remember that all knots should be tied upon one side or other of the incision. If a knot happens to be tied directly over the incision it can as

a rule be easily slipped over to one side. The reasons for this arrangement are two. If the knot is left immediately over the incision or cut surface, the ends may dip down between the edges and so prevent primary union. Again, when we come to remove the stitch we can catch the knot with a pair of fine toothed forceps and, with blunt pointed scissors, degress the integument at the stitch hole sufficiently to cut off the suture at some distance below the surface; then making traction on the knot in a direction away from the newly united edges the shortest possible amount of thread is drawn through, saving the patient pain and preventing infection by carrying some of the external part of the suture through the tissue. When placing stitches in a wound or incised surface, great care should be taken not to injure any deep lying nerves or vessels or any organ adjacent thereto by passing the needle too wide or too deep.

When proceeding with operation, and this applies especially where the blood vessels are numerous and tortuous, for instance about the face, neck, chest and extremities, it is well to have a qualified assistant to compress the important vessels leading to the field of operation. This materially aids in shortening the operation and helps the operator do neater and better work. All vessels from which hemorrhage has occurred should be secured before entering any cavity beyond. I emphasize this point by stating a case of my own, that of a boy suffering from diphtheritic obstruction of the larynx. This case I ultimately lost with a septic pneumonia when a little more care in securing the vessels might possibly have saved his life. The abdominal surgeon realizes the importance of securing all vessels before he enters the peritoneal cavity. The genito-urinary surgeon is careful, when passing through the perineum, to check all bleeding points with ligature, or catch forceps, or to at least thoroughly pack the site of the wound so as to completely control all hemorrhage in this region before entering the bladder. In the operation of perineal lithotomy there is a little point that is well to bear in mind, viz., when the sound is in the bladder, and the incision into the bladder has been completed, it will be very embarrassing to the surgeon to accidentally or intentionally remove both sound and forceps before the calculus has been grasped. It is a very difficult thing to introduce them. I would advocate more general blood letting for cerebral apoplexy; for mastoiditis early incision and exploration if necessary; for cellulitis early and multiple incisions. After operations give as little anodyne as possible, none at all is better. Here codein is preferable to morphin, on account of its less depressing, less constipating after-effects. If morphin must be given it is preferable to use the hypodermic syringe. For the pain after an operation involving the brain, give bromides. For abdominal pain after laparotomy give teaspoonful doses of hot water and apply hot water to the abdomen, where it can be done without infecting or wetting the wound. Be careful to prevent vomiting after abdominal incision. This may be done by cocain spray to the nares, by laying a cloth wet

with vinegar over the face, or by counter irritation over epigastric regions, etc. The pain, after bladder operations, may be relieved by rectal injections of hot water, or when severe by a suppository of opium; the same for pain following rectal operations, when not extensive. For preventing the extreme thirst following abdominal operations, it is a good plan three or four days before the operation to commence having the patient drink large quantities of water. In this way you will get rid of much of the thirst which is so intolerable after an extensive operation. There are points all along the road of surgery. Last. but not least, let me try to make a little point on thorough preparation. even in the smallest operations. When opening the smallest abscess, when removing a foreign body however minute, when introducing an instrument of any kind into a wound or into any of the natural cavities or orifices of the body, remember in all cases, to have your hands and instruments surgically clean; look well to the field of operation, see that it is as thoroughly prepared as though you were going to do a capital operation, for more than once you and I have seen disastrous results from not being careful enough. J. H. W.

OBSTETRICS.

IN CHARGE OF

GEO. GILLETT THOMAS, M.D.,

R. L. PAYNE, M. D.,

PREGNANCY FOLLOWING VENTROFIXATION WITH IMPROVEMENTS IN TECHNIQUE.—(Author's abstract) A. Lapthorn Smith, M.D., M. R. C. S. Eng. The author's conclusions were based upon about 2,500 cases by 41 operators, including 111 cases of his own, reported in reply to a circular letter of inquiry.

1st. That as far as curing retrodisplacements is concerned, whether retroflexion, retroversion, anteflexion with retroversion, and also prolapse of the uterus, ventrofixation with two buried silk stitches passing through peritoneum and fascia gives the most reliable results. Failures are unknown when the operation is performed in this way.

2nd. Ventrofixation should be reserved for cases in which abdominal section is necessary for other reasons, such as detaching of adhesions and the removal of the diseased tubes which caused the adhesions. When it is expected that pregnancy may follow, some other operation should be chosen, because

3rd. Although pregnancy only followed 148 cases out of about 2,50c, still in 30 per cent of these, or 36, there was pain, miscarriage or difficult labor requiring obstetrical operations.

ath. When suspensio uteri was performed, that is the uterus attached to

the peritoneum, only a few relapses occurred; but on the other hand the patients were free from pain during pregnancy and the labors were less tedious; neither did they require resort to serious obstetrical operations. The uterus should therefore be suspended rather than fixed to the abdominal wall in all cases in which any part of the ovary is allowed to remain.

5th. A third method, it is claimed by some,—namely the intra-abdominal shortening of the round ligaments—is preferable to either ventrofixation or suspensio uteri. This may be done either by drawing a loop of the round ligament into the loop which ties off the ovary and tube; or in cases in which the latter are not removed, simply to detach them from adhesions and shorten the round ligament by drawing up a loop of it and stitching it to itself for a space of about two inches. By this means the round ligament develops as pregnancy advances, and the dragging and pain and other more serious accidents which are present in 30 per cent of the cases of ventrofixation are certainly avoided.

6th. If the uterus is attached to the abdominal wall, the stitches should be kept on the anterier surface but near the top of the fundus; the complications were more frequent when there was too much anteversion than was the case when the anterior surface of the fundus was attached to the abdominal wall.

7th. As large a surface as possible should be made to adhere, by scarifying both the anterior surface of the fundus and the corresponding surface of the abdominal peritoneum, in which case one buried silk suture will be sufficient to keep the uterus in good position.

8th. Several of my correspondents mentioned incidentally that they knew of many cases of pregnancy after Alexander's operation and that in no case was the pregnancy or labor unfavorably influenced by it. Alexander's operation should therefore be preferred whenever the uterus and appendages are free from adhesions.

oth. The results of Alexander's operation are so good that even when there are adhesions it might be well to adopt the procedure of freeing the adhesions by a very small median incision and then shortening the round ligaments by Alexander's method; after which the abdomen should be closed. This could be done without adding more than ½ of 1 per cent to the mortality, which in Alexander's operation is nil.

Motes and Items.

Mathews Quarterly Journal has been changed into a monthly journal and will hereafter be known as the Louisville Journal of Medicine and Surgery. In the editorial work Dr. Mathews has associated with him Dr. H. Horace Grant.

UNWELCOME INFORMATION.—Perry Patettic: "Gee whiz! This here paper says the blood in a man's body travels more'n 60,000 miles in a year."

Wayworn Watson: "Wot did you go an' tell me for? Ain't I tired enough already?"—Cincinnati Enquirer.

Reading Motices.

COCA ERYTHROXYLON.

We need not enter into a full description of the history of the Erythroxylon Coca, as we believe that most medical men are fully acquainted with the principal facts concerning the plant. We may, however, recall to mind that the leaf is the only part of the plant used. Very much depends, therefore, upon the plucking of the leaf, and the time at which it is plucked; the subsequent care of the leaf being matter of considerable importance, and affecting very materially the preparations made from M. Mariani was the first in Europe who took up the study of the plant, and over 35 years ago commenced manufacturing for the medical profession the various specialties associated with his name, viz., "Vin Mariani," "Elixir Mariani," "The Mariani," "Pastilles Mariani," etc., preparations which are known all over the world, and which have acquired their well known reputation by their purity and efficacy. The stimulating and strengthening property of the leaf in its natural state has been tested by experienced travelers and botanists during several centuries, and it is this invigorating property which the physician wishes to bring into use, and which he is enabled to do in a palatable form by means of "Vin Mariani," this wine being indicated where there is great depression, long continued exhaustion, and where a special stimulative action is desired. "Vin Mariani" is agreeable, palatable, imparting by its diffusibility an agreeable warmth over the whole body, and exciting functional activity of the cerebro spinal nerve centers. We have frequently prescribed this wine, and we can, from practical experience, recommend it. -The Provincial Medical Journal, London, Eng.

In prescribing the products of Manufacturing Pharmacists, we should be guided to a great extent by the business standing of the manufacturers. No other house in the South or West has a better reputation for strict integrity than the Robinson-Pettet Company, Louisville, Ky. We do not hesitate to recommend the preparations advertised by them on page 2, this issue.

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Original Communications.

SOME PHASES OF SUGGESTIVE THERAPEUTICS BY FRENCH PHYSICIANS.

By M. E. Goble, M. D., Mich. and A. McDonald, Washington, D. C.

THE qustion of hypnotism, like many modern medico-social questions, is in an embryonic stage. As is well-known there is the old Charrest school which considered it almost entirely a pathologic phenomenon. Later the Nancy school arose which placed it more in the domain of physiology. This school at present is in the ascendency. But whatever one's opinion may be, or whatever school may approach nearest the truth, the therapeutic or practical side of hypnotism or suggestion is of interest to all.

We give in substance the methods and cases of Drs. Dumontpallier and Gorodichze of Frace.

CASE OF DR. DUMONTPALLIER OF PARIS, SHOWING THE THERAPEUTIC CHARACTERS OF SUGGESTIONS AND AUTO SUGGESTION.

A woman of the better class, aged 37 years, born of arthritic parents, had been, after a hard labor followed by puerperal fever, afflicted with eye troubles, which, in the opinion of celebrated ophthalmogists, were considered as the consequence of a nervous state. These eye troubles lasted many months and were characterized by such fatigue of vision that the patient could read only a few moments without being seized by an extreme fatigue of the sight with impossibility of continuing the reading.

Following a second normal confinement the same woman had

been subject to crises of asthma which had lasted many months,—nervous asthma as it was not possible to prove any cardiac or pulmonary lesion. Moreover, after eating, during stomachic digestion, she was often seized by cardiac palpitations and very great pain. A persistent insomnia during many months, had led to extreme weakness with emaciation. Later, the nervous troubles were chiefly in the stomach, and soon an extreme weakness of the lower limbs had as a consequence compelled the patient to keep her bed, or to pass her days on her chair.

It was with these conditions of infirmity of the lower limbs, with stomach trouble and obstinate constipation, that Madame X. decided to come to Paris to take care of herself. Menstruation was irregular, but there was no uterine lesion sufficient to account for the infirmity of the lower limbs, and gastro-intestinal troubles.

For five months Madame X. had submitted to a treatment, which, directed to the stomach, had brought no satisfactory results, and the infirmity of the lower limbs remained the same, the more so as her regular physician had prevailed upon her to keep absolutely quiet.

It was in this condition that Dr. Dumontpallier was called to the patient, who, after telling him all her troubles, said that one of her friends had been cured by his councils of a paralysis which had lasted many years. Madame X. presented none of the symptoms of hysteria; showed, on the contrary, many of the symptoms of neuresthenia; pain in the neck and regions of the eyebrows, painful rachialgias between the shoulders. Inactivity of the stomach, absolute constipation, extreme anxiety, palpitation of the heart with great pain and insomnia which had not yielded to any of the ordinary hypnotics. In the recital of her troubles Madame X. mentioned that sometimes when she looked at a brilliant object she would experience a great tendency to go to sleep.

This fact was a light which confirmed the diagnosis of neuresthenia in a nervous arthritic person, the neuresthenia having had as a determining cause, an obstetrical lesion, a puerperal fever and mental strain. The patient was assured that she could be hypnotised and that hypnotic suggestion would cure her of all her ills as it had cured her friend of paralysis

Dumontpallier told her to come to his house the next day for the first visit. She replied "But, doctor, 1 cannot walk, I cannot descend my stairs; how can you ask me to go to your house?" The doctor insisted and said to her, "Madame you can descend your stairs, come to my house in a carriage and you can mount my three steps." This suggestive affirmation, while she was awake produced the effect foreseen, and the next day Madame X. was in the doctor's study. Then the doctor fixed a bright object at some distance from the chair on which she was sitting and said to her that she would go to sleep for ten minutes and on her awakening she would be able to walk with assurance, that her stomach trouble, palpitations, and pains would not occur again, that the next night she would sleep nine hours with neither dreams or night mares, and that she would awake the next day finding herself stronger and braver to struggle with all her ills which were going to disappear rapidly. He suggested to her further, that she would go regularly each morning to the He added that hereafter she water closet and with success. would be regular every twenty eight days, and that at the time of her periods she would experience no difficulty.

The next day Madame X. came again to the doctor's house; she was no longer the same person, she was confident of herself; she was able to walk, to eat and digest, she had no cardiac pain, she had slept nine hours, she had been to the water closet, and she declared spontaneously that she was not the same and she knew she was going to get well.

She wished, she said, to come to the doctor's house for sleep, because she knew that the sleep provoked restored her to energy. Presently, before putting her to sleep the doctor said to her that she would be able to give herself up to that repairer sleep at her home, if she felt any faintness. At the third and following visits Madame X. had no need of looking at a bright object to go to sleep. As soon as she was seated in the chair she went to sleep and from the time set—ten minutes—a quarter of an hour, and a thing worthy of note, Madame X. has a perfect perception of the progress of time, and awoke at exactly the hour indicated.

One might believe that the perception of the passing of time is in relation to the degree of suggestibility; so that, when that faculty of the measure of time is in certain patients, one is authorized to affirm that the cure by suggestion will be possible and rapid.

Madame X. came regularly for three weeks, and after each visit felt better and better. Dr. Dumontpallier considered Madame X. as being cured for the present and for the future; for the present because she no longer has the symptoms of the neurasthenic; for the future because she carries in herself the means of checking all malaise and that by auto-suggestion. Indeed, in order to cure those nervous troubles of a psychic order it suffices to suggest to patients the care which they must have to break the morbid habit. Indeed, what is it happens with many neurasthenics? After a moral emotion more or less vivid, transient or continuous, after a mental strain, more or less prolonged, after any traumatism, railroad accident, etc., there is produced immediately or after a short time a nervous trouble whose primary seat is in the cerebro-spinal axis or in the great sympathetic system, which trouble shows itself in the brain or medullary region, with weakness of limbs, an absolute want of rest. Soon the trouble invades the organs whose functions depend on the phrenic nerve, the pneumogastric, the great sympathetics, or lumbo-sacral plexus, then the patients complain of hiccoughs, of cardiac palpitation with pain, of intestinal sluggishness and of functional troubles of the genito-urinary organs. Their anxiety is extreme, they become morbid and the morbid habit keeps up in those patients the existence of neurasthenic symptoms.

These patients despair of being cured because the different remedies, which have been addressed solely to symptoms have been without success. The popular hypnotics, bromides and chloral have had only a tarnsient action and the patients resign themselves passively to suffer. They have no longer the confidence and the will necessary to triumph over sickness which is very often of a psychic nature. Often they are ignorant of the psychic nature which keeps up their suffering and despairing of cure by the ordinary medicine they decide to seek relief from their sufferings by the suggestive method.

LR. GORODICHZE'S IDEAS ON PREVENTING SEA SICKNESS BY HYPNOTIC SUGGESTION.

Sea sickness is due to vertigo which the mobility of objects determines, Darwin has said. We have objected wrongfully to the great naturalist because the blind are not exempt. The knowledge of the mobility of surrounding objects can exist without the visual sense—the other senses—hearing, touch and the muscular sense can convey to us the knowledge with no less precision.

Undeniably sea sickness always begins with a sensation of vertigo; pallor, frontal headache, disturbed respiration and cold chills preceding the nausea and vomiting. Nevertheless these same symptoms are produced on land. The moving train, the jolting gait of the camel or of the dromedary causes similar symptoms in many people.

M. de Varigny (14 years in the Sandwich Isles, Paris 1874) relates having experienced the most violent sea sickness, during the earthquake which took place in those Islands, April 2, 1868.

The vertigo, which is the first symptom, appears to follow the sensation of the loss of equilibrium. Observe the sailor; he moves his body with the ship, as a horseman with his mount in order not to receive any violent rebound. The body of the sailor bends, adapting itself to the most extreme movements of the ship. When one side of the ship rises he bends the limb of the same side and extends the other; if the stern or the prow sinks down, he bends the body forward or backward. Unconsciously all these movements come to be instinctive with him, solely by habit and education. Thus one acquires the sea leg only at the end of a long time or after many voyage.

The individual susceptibility is very variable. Some never become accustomed to the sea. Others, on the contrary, rapidly acquire immunity. Some brave a heavy sea and succumb to the rippling on the shore. Some remain insensible to the jerking of a boat and much annoyed by the slow movements of a vessel; some enjoy a long immunity on certain ships and are ill on ships of another kind. Yet one can say, in a general way, that people are more often sick on a screw steamer than on a wheel steamer. The pitching is more difficult to bear than the rolling of a ship. Women are more often subject to sea-sickness than

men and children less than men. The heat, the lack of air, the emenations from the kitchen of the ship or from the engine, etc., etc., are only occasional causes. Gorodichze gives the following definition to sea-sickness:

Sea-sickness is nothing more than a reflex action, of which the point of departure is a series of abnormal excitations, due to the instability of the boat in motion, and carried by the sensitive nerves of the integument and viscera—by the organs of sense—and the muscular sense. This way of looking at the pathology has brought him to the idea of trying to make an inhibitory centre by hypnotic suggestion.

CASES OF DR. GORODICHZE.

Four people, two men and two women, were all very susceptible to sea-sickness before the treatment; but after some sittings for hypnotic suggestion became absolutely free from it.

- Case 1. Madam D. age 36 years, slightly nervous, of good general health, had lived with her husband on the sea-shore. In more than a hundred times, even in calmest weather she had always been sick. After some hypnotic sittings she remained on board a small sail boat for several hours with a strongly swelling sea, without experiencing the least sickness.
- Case 2. Mr. B. age 40 years—neurasthenic. In a half score of voyages he had not had a single good one, but after having received inhibitory suggestions he has crossed the channel with a sea literally raging. He was the only passenger on board who escaped sea-sickness.
- Case 3. Mr. M. age 46 years—neuropathic, is less striking. On relatively calm sea it happened that now and then he was not sick. Yet the last ten voyages had been during very stormy weather, an excellent appetite was preserved. He had sensations of good health which he attributed to treatment.
- Case 4. Madam M. age 37 years. Subject to neuralgia and headache. Before the treatment she had made two voyages to Lunis and was sick both times. Since suggestive treatment she has never been indisposed in numerous excursions on the sea, with the most variable weather.

While sea-sickness is not a grave disease, yet the efforts of vomiting, violent and prolonged can bring very serious accidents, sometimes dangerous in cases of heart disease, of aortic anneurisms, arterial sclerosis and in pregnant women, in whom the frequent contractions of the abdomen and diaphragm would cause abortion or premature labor. The preventive treatment of sea-sickness protects a certain class of patients from accidents which might be dangerous.

SOME ABDOMINAL CASES.*

By George Ben Johnston, M. D., Richmond, Va., Professor of Gynecology and Abdominal Surgery, Medical College of Virginia; Fellow of the American Surgical Association; Member of the Southern Surgical and Gynecological Association, etc.

T IS a source of regret to me that I have not for the past ten or fifteen years kept the pathologic specimens that have come from the various operations I have performed, because great benefit may be derived later on from a correct study of these specimens. With this in view, for the last few months I have kept all specimens worth preserving, concerning a few of which I speak to you to night, giving a brief history of the cases from which they were obtained.

Case 1.—The first specimen I wish to show was taken from Mrs. R. D. B., aged twenty-four years, referred to me by Dr. J. P. Haller, Pocahontas, Va. Admitted to the Old Dominion Hospital January 17, 1898. Previous history uneventful save an attack of typhoid fever six years ago. Married six years; one child five years of age; no miscarriages. For two years has suffered with leucorrhea and very painful menstruation. Periods have not appeared for five months.

An examination of this case, made on the 18th day of January, revealed a large, globular tumor in the lower part of the abdomen, some enlargement and swelling of the breasts, discoloration of the nipples, and fluid in the breasts. On minuter examination fetal movements could be feebly discerned. A digital

^{*}Read before the Richmond Academy of Medicine and Surgery, June 12, 1808.

examination by the vagina revealed a large and eroded cervix, and inspection discovered a large ulcer upon the cervix which turned out to be a carcinoma.

This condition confronted us: Here is a woman only twenty-four years of age presenting a carcinoma of the cervix, complicated by pregnancy advanced to the fifth month. Complete hysterectomy was the only course for her relief. I thought it a pity to sacrifice the child, and therefore determined to keep her under observation to discover whether or not the disease was making rapid strides. It was ascertained that the spread was slow. I therefore determined it would be justifiable, so far as the woman was concerned, to defer any operative interference until the child was at least visable. I recommended a return to the hospital after the termination of the seventh month of pregnancy.

She was readmitted to the hospital on the 13th day of March and was operated upon on the 22d. The operation was the Porro, and the anesthetic used was chloroform. All of the ordinary preparations of the patient were made. The first step in the operation was the complete destruction of the cancerous tissue of the cervix by means of the galvano-cautery. A long, free incision was made in the abdominal wall, and quickly carried down to the uterus which was exposed and delivered through the wound. Two loops of a large elastic ligature were thrown around the cervix but not tightened. An assistant grasped the cervix firmly with the hand to control bleeding. The uterus itself was then incised by a free and rapid incision and immediately the child was delivered, cord clamped, and child turned over to the accoucheur. The ligature around the cervix was at once tightened and clamped, and when this was completed a large pad of gauze was put into the uterus and two stitches of pedicle silk were made to close the uterine incision. No attempt was made to dislodge the placenta, and a gauze sponge was placed in for the purpose of absorbing any oozing that might occur, thus diminishing the risk of contaminating the peritoneal cavity. In the meantime, the intestines had been protected by large sheets of gauze. From this point on, the operation was one of simple hysterectomy. The ovarian vessels were ligated, divided between the ligatures and then the uterine arteries were secured, the vagina opened from above, the cervix dissected out, as was also the upper portion of the vagina. As soon as this was accomplished, the proper toilet of the peritoneum was made and the wound closed by through-and-through silk-worm gut sutures. I have long abandoned the practice of closing the abdominal wound with tiers of sutures, using only through-and-through sutures of silk-worm gut. Vaginal drainage was used.

This woman made a very happy recovery. The child, which was rather poorly nourished, perished at the end of two and a half hours. The second day there appeared in the breasts a considerable flow of milk which was suppressed by the application of the so called Murphy jacket. The specimen from this case shows the uterus with placenta firmly attached, the umbilical cord and portions of the fetal membranes. I was much struck in this instance, as I have been in others, to see the extent to which very muscular specimens shrink after removal.

Case 2.—The next specimen, a rare one as presenting a very curious combination of pathologic conditions, is from the case of Mrs. A. V. W., referred to me by Dr. H. C. Beckett, Clover, Va. This patient, a white female, aged fifty years, gave the following history: Married at twenty-seven, but never had any children. Menstruated at seventeen, after which, courses were regular, but attended with much pain since marriage. Has considerable leucorrhea and bloody discharge. About eighteen years ago, consulted a physician in this city, who told her she had a small fibroid which would disappear at change of life. Not troubled again until June of last year, since which time she has had six attacks, each of increasing severity, of intense pain in abdomen, accompanied by some bloody drainage, and confining her to bed for several days during each attack. Admitted to the Old Dominion Hospital, May 3, 1898.

An examination of this patient revealed the uterus perhaps five times as large as normal, nodular, and somewhat depressed, the cervix being within easy reach of the examining finger which also revealed an ulcer upon the cervix and the further fact that carcinoma of the cervix was complicated by fibroids of the uterus.

A complete hysterectomy was undertaken and was free from incident. Upon removal of the uterus it was discovered that

not only were there fibroids in the structure of this organ, but also a subserous fibroid, situated on the posterior surface of the uterus and about the size of a small walnut, which had undergone calcareous degeneration here shown. You can hear the sound as it is struck by the nail. It was covered only by peritoneum with an absence of all othe tissue. In the body of the uterus other masses were plainly seen. This patient also made a perfectly satisfactory recovery and has returned home.

Case, 3.—One of the most interesting specimens I have to show you is that taken from a negro voman, Maria Prosser, referred to me by Dr. C. M. Miller of this city. This patient, aged forty eight years, was married at nineteen, and has had fifteen children, triplets once. Menopause six or seven years ago. No previous illness. Complains of severe pain and enlarged abdomen, which symptoms were first noticed about four years ago. Pain intermittent. Four months ago, had very severe attack of pain and rapid increase of swelling. Had general edema and some congestion of kidneys, due to pressure. Occasional dis charge from vagina, but no hemorrhage.

When I first saw her in consultation with Dr. Miller, she was much debilitated, greatly reduced, thoroughly anemic, abdomen enormously swollen, not only from the tumor but also from a collection of ascitic fluid, and edema of the lower extremities. Examination showed a large, irregular tumor occupying lower portion of the abdomen, extending above the umbilicus, higher on the right than on the left side. The abdominal walls were very thin. Prominently shown above the symphisis was a protuberance half the size of a cocoanut, movable from side to side and plainly attached to the tumor. The neck of the uterus was out of reach of the examining finger. The mass resembled a full bladder displaced by a pelvic tumor, but was pronounced to be the uterus with tumor attached. The diagnosis made was intraligamentous cyst of right side with the uterus lifted out of the pelvis. Deeming it unwise to operate in her present condition, she was put under a preparatory course and then operated upon at the Old Dominion Hospital on May 21st.

After the incision was made and the tumor exposed, the accuracy of the diagnosis was verified. Ordinarily this would have been an extremely difficult case and, in all likelihood, radical

operative interference would have proved fatal. Goodell says, "These are the patients that die on the table."

We are indebted to Dr. Rufus B. Hall,* of Cincinnati, for a recent method of dealing with intraligamentous cysts which renders the operation almost as safe as an ovariotomy. The old method was to split the peritoneum, then proceed to enucleate the cyst. As the blood supply is very large this meant very profound and sometimes fatal hemorrhage. The operator was embarrassed by the great flow of blood, had to work with the utmost rapidity, his manipulations had to be carried on by the sense of touch and not by sight. Having heard Dr. Hall describe his method at the recent meeting of the Southern Surgical and Gynecological Association, where he exhibited a specimen very similar to the one before us, I concluded to try his method in this case, and found it to work admirably.

I proceeded to do a supra-vaginal hysterectomy and was able to control the blood supply to the tumor. I ligated the ovarian artery on the healthy side with a double ligature, then severed the tissues between the ligatures, went down to the uterine artery on the same side and ligated it, after securing which I returned to the affected side and ligated the ovarian artery. This left no vessel of magnitude, save the uterine artery on the affected side. I then severed the cervix from the good to the affected side until I reached the uterine artery, passed a ligature around this and proceeded to lift the tumor out. Practically no blood was lost.

After removal the tumor was discovered to have three very large cavities filled with fluid and accumulated blood. One of these cavities contained a clot very firmly organized; in the others the fluid was thin and left clean walls.

This woman did extremely well for the first three days; then, in the temporary absence of the nurse, got up and sat in a chair. Untoward symptoms developed, and her life was dispaired of, but the symptoms subsided and an excellent recovery followed, the patient leaving the hospital at the end of six weeks. This case is of particular interest, as occurring in a negro woman. Tumors of this type in the negro race are even rarer than ovarian tumors, which latter are almost never seen. This specimen may, therefore, be regarded as a surgical curiosity.

^{*}Trans. South. Surg. and Gyn. Assn., Vol. X., p. 184.

The next specimen is that taken from a woman recently admitted to the Old Dominion Hospital, referred to me by Dr. R. W. Fry, of Roanoke. Mrs. M. C. W., aged thirty-five years; Previous history: Menstruation at fifteen; regular ever since. Married at eighteen; three children and five miscarriages; last three due to lacerated cervix. Typhoid fever at the age of twenty-five. Says she has suffered with congestion of the womb for ten years, and has been treated for ulceration of the womb. Pain is most severe between periods; is loc ted in lower part of the abdomen, extending down the thighs, especially the right one. Dr. Fry examined patient, and, finding a mass in the pelvis to right of uterus, diagnosed some form of ovarian tumor and referred the case to me. Admitted to the Old Dominion Hospital June 8, 1898. On the right side I found a mass the size of a large orange; on the opposite side there was an enlarged fallopian tube, the nature of which I was unable to make out, though convinced that it was a hydrosalpinx or pyosalpinx. The ovary on the left side was enlarged and very firm.

Operated upon on June 11th. Upon opening the abdomen it was found that the entire pelvis was domed over by a mass of matted adhesions, the like of which I have rarely seen. It seemed impossible to enter this roof in order to get down into the crevices where lines of cleavage could be established. After a time we were successful in our attempt and began to excavate the uterus and its appendages. When this was accomplished, the left tube was found in a state of hydrosalpinx as large as the thumb of a good-sized hand. The ovary on the same side contained a hematoma. The mass on the right side was discovered to be an ovarian abscess. Supravaginal hysterectomy was decided upon and accomplished in the usual way, after which a glass drain was inserted. This is a very interesting specimen as showing a multitude of pathologic conditions.

Case 5.—Here is another specimen, which I regret to say has been practically destroyed by the evaporation of the alcohol from the preserving fluid. It comes from a woman referred to me by Dr. J. Bolling Jones, of Petersburg. Miss A. L. F., white, aged thirty-eight years, was in good health up to sixteen years ago. At that time noticed a protrusion of the cervix. This

has given her much discomfort. Marked nervousness, indigestion and nausea. Admitted to the Old Dominion Hospital, December 7, 1897.

It was perfectly easy to diagnose hypertrophied cervix, descended uterus, fibroids (which were everywhere to be felt over the fundus of the uterus), and also a tumor the size of a cocoanut to the right of the uterus, but as to what this tumor was, I felt uncertain. I gave the diagnosis of probable dermoid cyst and the operation proved its correctness.

The uterus was found to contain a number of fibroids varying in size from a hickory nut to a small lemon. Apparently all of them were subserous. It was therefore not necessary to remove the uterus, but was to do myomectomies. Therefore these four fibroids were enucleated and the button-holes through which they were removed from under the peritoneum were stitched up by Lembert sutures. The mass to the right of the uterus was enucleated, raised out of the pelvis and removed by the ordinary method of ligating its pedicle. A ventro-fixation was next performed. The cervix was found hypertrophied and within the vagina. As a matter of safety the undiseased ovary was removed, hoping to produce an atrophy of the uterus, diminishing the elongated cervix and rendering the fixation more safe. These objects were accomplished by the operation.

On examining the tumor it was found to be a dermoid cyst, filled with the characteristic cheesy masses and oily fluid, and contained a great deal of long, coarse, brown hair, growing very abundantly from the cyst wall. Teeth, bone, serous and mucous membranes are occasionally found in these tumors, and by one or two observers it has been reported that tissne resembling brain substance has been found in them. This patient made a first-rate recovery.

407 East Grace Street.

Society Reports.

NEW YORK ACADEMY OF MEDICINE.

SECTION IN ORTHOPÆDIC SURGERY, Meeting of March 18th, 1898.

GENERAL DISLOCATION OF THE HIP.

- Dr. R. Whitman presented a little girl 2½ years of age on whom he had operated for congenital dislocation of the left hip when she was 18 months old. The method followed had been the bloodless operation of Lornez and the plaster of Paris bandage had been finally removed last November. In the absence of any trace of deformity or disability it was impossible to detect any difference between the two sides and the cure was evidently perfect. He thought it was the first cure attained by this method in New York.
- Dr. T. H. Myers reported that he had seen last week the girl on whom he had operated at the age of $3\frac{1}{2}$ years in January 1895, by the mothod of Paci. The joint was firm with no telescoping. There was no limp and the child runs, jumps and hops with perfect freedom. He thought it was the first succesful application in this city of Paci's method. (See report of Dr. Myer's case and the discussion in the North Carolina Medical Journal, May 1897, pp. 329-331. Ed.)
- Dr. A. M. Phelps said that in the patient exhibited there was a perfect reduction, but it was probably a case of dislocation at birth in a child in whom the acetabulum was normal. He did not believe that the bloodless forcible reduction was a good method. After the child had passed the second year the head was developed, the acetabulum was undeveloped and the capsular ligament was drawn out and constricted like an hour-glass, making reduction mechanically impossible. There was no reduction—simply the conversion of a posterior into an anterior dislocation. The only way was to make an acetabulum and put the head of the bone into it.
- Dr. G. R. Elliot said that the acetabulum in these cases was fairly developed in children up to 4 years of age. The head was felt as it was forced over the border of the socket, it was felt to be retained and it could be easily dislocated again. If it was

retained by fixing the limb at a proper degree of abduction it could not get out of its position, being held by the ligaments and muscular structures and the probability of its leading to a more perfect acetabular development was greater than after an operation in which the ligaments and muscles are not cut.

Dr. Whitman said that the head of the bone was capable of making an acetabulum and that a rudimentary acetabulum existed in nearly all cases as was proved by the observation that when the head of the femur was pushed in place it stayed there. When the dislocation was anterior, which was not usually the case, the bone should be twisted around.

COXA VARA.

Dr. Whitman also presented a boy it years of age who had the waddling gait and lordosis of congenital dislocation of the hip. It was, however, a case of double coxa vara with prominent and elevated trochanters. There was free flexion and extension but limited abduction. There was no pain or discomfort. Both femoral nrcks were depressed beyond a right angle with the shaft, but not bent backwark, consequently there was no eversion of the limb, otherwise the signs were typical. The trouble began when the boy was four years old and had its origin in rickets. He has been treated for hip disease at intervals for six years. Dr. Whitman had seen several cases in children, one of whom was but 2½ years of age. The affection is therefore not limited to adolescence.

DEFORMITY OF THE TIBIA-OSTEOTOMY.

Dr. B. F. Curtis presented a patient on whom he had operated for anterior bowing of the tibia. The patient, a girl of 12 years of age, had been presented and the case discussed at the meeting of November 19th, 1897. (See discussion in the North Carolina Medical Journal January 20, 1898, pp. 36-40. Ed.) At that time the tibia was three inches longer than that of the sound leg and the circumference of the leg was 1½ inches more than that of the other. The general health had been poor, probably the result of pain. A skiagram showed thickening with some irregularities in the enlargement and an almost complete disappearance of the epiphyseal line due to pressure. The diagnosis had been undetermined. Sarcoma, syphilitic osteitis, necrosis with a sequestrum, and abscess of the medullary cavit

had been suggested and considered. After rest in bed for a month and the administration of iodide of potassium, the tenderness had disappeared and the general health was much improved and it became more evident that the local affection was of syphilitic origin. On January 6th, the fibula was fractured and the tibia straightened and shortened by the removal of a wedge measuring over an inch posteriorly, and two inches on its anterior surface. The bone was found to be roughened on the surface and the central canal had disappeared. The bone was hard, but not so hard as cortical bone in the adult. It was of the same consistency all the way through and was pronounced by a pathologist to be normal in structure. The subcutaneous soft parts were so voluminous that the skin was with difficulty made to cover the wound. Later two long incisions were made on either side of the wound and the skin was dissected up and drawn over the bone. Thiersch grafting was done on February 22nd. The result was a fairly good leg. The bone was of normal length and there was no tenderness. Ability to walk well had not been acquired as the patient had been out of bed only a week.

Dr. T. H. Manley said that the gross appearances were those of malignancy limited to the hard tissues but with an obvious tendency to infiltrate into and involve the soft parts. The osteoplastic procedure had gained all that could be desired in reducing the length of the limb but he believed that further trouble was sure to follow and would be interested in the progres of the case.

Dr. Phelps believed that the condition was due to congenital syphilis.

MULTIPLE OSSEOUS TUBERCULOSIS?

Dr. V. P. Gioney presented a boy whose previous history was rather obscure. Early in 1897 the left limb had been amoutated for "consumption" of the knee. He had been under treatment since last May. There was a focus in the shaft of the left humerus which had been operated on several times and also one on the right elbow. In the latter had been found streptococci, staphylococci and micro-organisms resembling diphtheria bacilli, but no tubercle bacilli. Recently there had been beginning anchylosis of the jaw. A previous diagnosis of multiple sarcoma had been made but it was more than probable that the foci encroaching on the joints were tuberculous.

RADIOGRAPH SHOWING AN OSTEITIC AREA.

Dr. Myers exhibited a radiograph which showed an area of diminished density within the head of the radius and increasing density about it. A sclerosing osteitis probably surrounded the site of a caseous focus which had been made in locating a diseased area by the x-ray.

POTT'S DISEASE TREATED BY FORCIBLE REDUCTION OF THE DE-

Dr. Gibney showed a boy 12 years of age who had Pott's disease as long as he could remember. There had been no previous treatment. The kyphos had been very marked. On March 1st, 1898, a moderate degree of force under an anæsthetic had reduced the kyphos a good deal, the parts yielding easily, and a plaster of Paris corset was applied in the prone position, from the pelvis to the axillæ. He was kept in bed for three days much against his wishes, and since then has been playing about the wards. There was absolutely no reaction. Another boy, 6 years of age, was presented wearing a plaster of Paris corset after forcible reduction of a well-warked kyphosis. Previous treatment had been by apparatus, jackets, etc. The disease, in the dorsal region, had been long since arrested. The projection had been considerably diminished by an amount of force not greater than in the first case. During the operation his respiration became rather labored and the anæsthesia was discontinued. The only reaction was a slight slowing of the pulse after the operation and on one day since. These patients were presented to show that deformities can be materially reduced by this method without reaction or any immediate bad results. In after treatment it was not necessary to fix the head and shoulders. If the plaster is brought well up there would be no recurrence. English surgeons were advocates of the steel apparatus; they criticise the French who put their patients up in cotton covered with plaster of Paris. There were plaster jackets and plaster jackets. If too much cotton were used a good fit would be impossible, the parts would recede and the jacket would become If the plaster was properly applied it would give no trouble. The fear that forcible correction would induce tubercular action in the meninges or elsewhere was not well founded. In an experience of years in the forcible correction of deformities of the hip it had been the rarest thing in the world to get any dissemination of the bacilli.

Dr. Phelps presented a girl 7 years of age wearing a plaster of Paris jacket after forcible reduction under ether of an extremely large kyphos. The disease had been of 4½ years duration and was between the 6th and 9th dorsal vertebræ. A jacket had been worn for four years. The operation seemed very cruel and had been undertaken with fear and trembling, only partially dissipated by the favorable reports of French operators. The kyphos had been nearly all reduced after so much snapping and cracking that it was thought the child's back was broken. There was no reaction and the patient was up and about in less than 4 days. The procedure was applicable to the early stages of the disease. In the presence of a large kyphos or anchylosis or abscess it was a dangerous method.

Dr. W. R. Townsend related a case in which an inconsiderate resort to this operation would have been disastrous. years of age was under treatment upon an open frame for disease in the upper dorsal region. There was a cough and impeded respiration and other symptoms of bronchitis, followed rather suddenly by asphyxia and death. Autopsv showed a retro pharyngeal abscess in the median line directly over the vertebral column and extending to the right. pressure on the trachea which was normal in size and not flat-Numerous enlarged glands had pressed on the recurrent larvngeal nerve and caused paralysis of the vocal cords. The second dorsal vertebra was so much diseased that the finger was pushed right through to the spinous process. Forcible reduction would have ruptured the abscess or done some damage to The dangers of the operation were readily realized. the bone. The procedure might give good results in suitable cases but it should be well tried before being widely recommended.

Dr. Myers had not as yet heard of any cure as the result of this procedure. The cases should be very carefully selected and care taken to ascertain that no abscess was present. The operation was dangerous and results should be waited for before the method should be commended at all. The protection given to the spine after the operation should be most perfect.

Dr. H. L. Taylor could not think well of this method without

the light of further experience. The tendency had been to make the procedure much less radical than it had been at first when reduction of the deformity sometimes called into action all the strength of the operator with perhaps resection of the projecting spinous processes and in suitable cases excision of wedges of bone. In some instances the spinous processes were wired together after reduction and it was considered important to encase the head and the pelvis in the plaster of Paris jacket. With the obvious tendency towards simplification of the treatment it remained to be seen how much of the original operation would remain after the method had been well tried. It was safe, thus far, in the hands of experts but it would be dangerous to encourage the general practice of the method.

Dr. R. H. Sayre said that if the diagnosis were made before the kyphos appeared there would be no necessity for this operation. He thought that if it could be determined in advance which cases could be straightened without damage, this operation could be readily accepted. In some cases there were no vertebral bodies left and the column was held together by the spinous snd transverse processes. In other cases the bone was so diseased that forcibly straightening the spine would produce gaps between the vertebræ leading to the production of abscess. It was extremely doubtful whether this method would be employed. In any event the cases should be most carefully selected and there should be no elevation of temperature and no morbid action present.

Dr. Manley thought that the forcible correction of this deformity in appropriate cases was justifiable, to be followed by some form of thoracic support after correction.

Dr. Elliott said that two cases of forcible correction followed by death had been recently reported in the British Medical Journal.

Dr. A. B. Judson had seen no reason for not being satisfied with the treatment by the use of the steel brace. Patients with Pott's disease suffered so much inevitable daily traumatism in standing and walking that the injury accompanying the method under discussion would not seem to be necessarily fatal or even dangerous. The question was whether it was wise to add to the unavoidable and habitual traumatism. If we could restore

the curves and strength and mobility of the spine, almost any treatment would be accepted. But it could not be hoped to carry recovery to that desirable point. Moreover, it was very doubtful whether consolidations would come to our aid at the opportune moment to secure the improvement in shape made by the forcible reduction.

Dr. Phelps had looked up the literature of the subject. On the one hand it had been stated and demonstrated by radiographs that bone had been re-produced in cases in which there was wide separation after reduction and one operator had reported 204 cases with no deaths and no accidents. On the other hand, other operators had reported many relapses, sometimes with paralysis, a number of deaths had been reported, the kyphos had been reduced in a cadaver with rupture of an abscess and in another subject with tracture of a vertebra. Some investiga tors are enthusiastic in favor and others condemn in round terms. Although there was probably a field for operation it was necessary to proceed slowly.

Dr. Gibney said Dr. Townsend's patient was an exceptional one. Most patients seen offer no contra-indication to the operation. He had not found that patients with a deformity of the spine were cheerful at the prospect of going through life with it. They were morose and felt that nature had treated them harshly and it was necessary to do something for them. If he had a child with such a deformity he would welcome almost anything which promised relief. He understood the dangers of the operation and was opposed to its wholesale performance. While fully appreciating the importance of what had been said he thought that clinical facts were also entitled to weight. He believed that deformities could be materially reduced by the method but that it should be done gradually at several sittings rather than all at once.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

MEETING HELD JULY 12, 1898.

Dr. M. D. Hoge, Jr., president, in the chair. Dr. Mark W. Peyser, secretary and reporter.

Dr. George Ben Johnston reported some abdominal cases (see page 79).

Dr. Jacob Michaux exhibited casts of the palms of the hands and soles of the feet of a young man, aged nineteen years. The patient had a fever, 1020, the nature of which was indefinite. The patient was of spare build. There was no eruption nor tongue symptoms. He was not seen until three days after the inception of the fever. A dose of three grains of quinine was given, and three hours after there was almost a convulsion, though consciousness was retained. In four or five hours a rash appeared. Dr. Michaux said he would have been uncertain as to the influence of the quinine and its dose producing the exfoliation were it not for the information derived from the mother, an intelligent woman, that it had occurred before, but she had neglected to mention it. He had heard of but one other case. The casts in his came off in a week, and the whole epidermis of the body was shed it particles. This explanation of the phenomenon was idiosyncrasy, and a rather marked case was that of Dr. Bolton, who, whenever he uncorked a bottle of morphine, although holding it out at arm's length, would have an eruption to appear all over the body. The first time the effect was produced was when weighing out a half-grain, a sun-burned appearance was noticed around the eyes. The cause was not suspected for some time.

Dr. J. N. Upshur said the history of Dr. Michaux's case was more like scarlet fever than anything else. He did not think the mother's information amounted to anything, for that kind derived from relatives of patients was unreliable. There was nothing in the physiological action of quinine to explain the condition. The period of incubation was that of scarlet fever, and the explanation thus was more natural than by quinine.

Dr. Michaux asked leave to state that he had again given a like dose of quinine with a like result. The information obtained from the mother was given her by an intelligent physician who had attended the patient in time past.

Dr. Johnston said he believed Dr. Michaux's explanation of the case, the correct one, viz., idiosyncrasy. He had never seen such a profound effect from quinine, but had seen a severe dermatitis. The following confirmed his belief. In the case of an old lady, a five-grain dose of iodide of potassium produced alarming symptoms. Two and a-half grains produced the same and likewise did continued reductions, even until one-tenth of a grain was reached, when there were the same symptoms, with same degree of violence. Dr. J. B. McCaw will faint when he smells camphor. Dr. Bryant brought a case to him for operation, and he was about to pack with iodoform gauze, when the doctor asked for time to leave the room, saying if he remained until the container was opened he would have nettlerash before he could reach the bottom of the stairs. Dr. Mcrris, of this city, cannot pass within seven feet of growing poison-oak without having its characteristic effect. All these being so, why could not quinine produce the effect as shown by Dr. Michaux? He was prepared to believe it true.

Dr. W. S. Beazley exhibited three teeth extracted from the mouth of an infant, the first when it was thirteen days old, the second on the fifteenth day, and the third on its nineteenth day. He saw the infant on the third day after birth, and found the left cheek and eye and the nose inflamed, the last two discharging. In examining the jaw later he saw an opening in the gum from which pus was exuding, and also a loose tooth, which he pulled. Two days later a molar was seen, which was pulled, and again in four days a second molar, which met with the same fate. All the teeth came from the left upper jaw. He was told there was no evidence of teeth at birth.

THE LESIONS OF INDURATUM.—Audry (Annales de Dermatologie et de Syphiligraphie, No. 3, 1898) concludes from a histological and bacteriological examination of the lesions of erythema induratum of Bazin that this affection is no way connected with tuberculosis. The histological lesions appear as a fatty degeneration developed upon a territory affected by considerable spontaneous edema. The inflammatory signs are reduced to a minimum. The malady is to be regarded as connected with lymphatism, and not with scrofula; and the author is inclined to accept the view held by Hardy, that erythema induratum is only a chronic, sometimes ulcerating, variety of erythema nodosum.

NORTH CAROLINA MEDICAL JOURNAL.

ROBERT D. JEWETT, M.D., EDITOR

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Editorial.

TIDE-WATER MEDICAL ASSOCIATION.

This Association, composed of members of the profession of tide-water Virginia and North Carolina, held its second meeting at Virginia Beach, July 14th and 15th. There was a good attendance and the meeting proved to be a very enjoyable and profitable one.

The following interesting papers were read and freely discussed:

"Malarial Hæmaturia," by T. P. Hope, M. D., Hampton, Va. "Pernicious Malarial. Fever, and Treatment, with Report of

Cases," by F. W. Whitehead, M. D., Suffolk, Va.

"Diphtheria," by Jesse H. Peek, M. D., Hampton Va.

"Diphtheria—Its Diagnosis and Treatment," by E. E. Feild, M. D., Norfolk, Va.

"Painful Fissures and Ulcers of the Rectum," by Livius Lankford, M. D., Norfolk, Va.

"Remarks on Local Anæthesia," by John F. Woodward, M. D., Norfolk, Va.

"Some of the Sequelæ of Gonorrhea," by John C. Rodman, M. D., Washington, N. C.

"Inflammation of Seminal Vesicles and Its Treatment," by B. M. Baker, M. D., Norfolk, Va.

"Viskaline in Treatment of Zymotic Diseases," by D. F. Earnest, M. D., West Norfolk, Va.

"Cerebro-Spinal Meningitis," by L. C. Brock, M. D., Smithfield, Va.

"Pathological Report of a Case of Cerebro-Spinal Tever," by Charles R. Grandy, M. D., Norfolk, Va.

"Papilloma of Larynx," by W. E. Driver, M. D., Norfolk, Va.

"A Case of Multiple Pregnancy," by J. Emmett Sebrell, M. D., Courtland, Va.

"Report of a Case of Hydrophobia," by Gray G. Holliday, M D., Portsmouth, Va.

"High Irrigation of the Colon with Permanganate of Potash Solution in all diseases of this organ," by Lucien Lofton, M. D., Emporia, Va.

"Pessaries," by R. L. Payne, M. D., Norfolk, Va.

"Infantile Diarrhœa," by W. L. Harris, M. D., Virginia Beach, Va.

"Premature Interruption of Pregnancy," by Herbert Old, M. D., Norfolk, Va.

"Abdominal Surgery-Report of Case," by Lomax Gwathmey, M. D., Norfolk, Va.

The Association elected the following officers for the next meeting, which will be held in Wilson, N. C., some time in January next:

President-Dr. E. F. Corbell, Sunbury, N. C.

First Vice-President-Dr. Charles T. Parrish, Portsmouth, Va. Second Vice-President-Dr. T. N. White, Belvidere, N. C.

Secretary-Dr. John C. Rodman, Washington, N. C.

Among the most pleasurable incidents of the meeting was the

presentation to Dr. Junius F. Lynch, of Norfolk, the retiring President, of a handsome case of surgical instruments. This was an unexpected token of the appreciation of Dr. Lynch's courtesies felt by the representatives of the firms who made exhibits at the meeting. The presentation speech was made by Dr. Gloson, representing Mess. Parke, Davis & Co., and was gracefully responded to by the recipient.

We extend our congratulations to the Association on the success of the meeting.

THE HEALTH OF OUR ARMY OF INVASION.

In a recent issue of the JOURNAL we expressed some rather pessimistic opinions in regard to the probability of the Army and Navy medical officers being able to prevent an outbreak of yellow fever among our troops in Cuba, with a consequent loss of a considerable number of lives. Since that time there has been some fighting in the Island with the result that the Spanish forces in Santiago, and about 5,000 square miles of the eastern extremity of the Island have surrendered, and a military government has been established over the conquered section.

The army which was besieging the city, found that it was impracticable to carry out the ideas of sanitarians in regard to soldiers "not being employed in the digging of trenches"; in sleeping "at least two feet above the ground" (it is sad, but true that many are now sleeping one or two feet below the ground): in "not sleeping on wet ground" (they were often prevented from lying down at all by the quantity of water on the ground); in "sleeping under mosquito nets" to prevent infection by the stings of insects; in "drinking only boiled water"; and in other suggestions which health officers find it very hard to get people to carry out even at home and in civil life. For several days the press reports have been showing an increase in the number of cases of yellow fever among the troops. It is found that Santiago, which is now on our hands is in a most filthy and generally unsanitary condition, and that yellow fever exists there. The 5,000 Spanish soldiers at Guantanama, which have just surrendered have yellow fever among them, but they have

to be taken care of now, fed and transported back to Spain. In fact there is yellow fever everywhere—what else could be expected in the very hot bed from which come nearly all the cases that have devastated the Southern States in the past, and threaten them each summer?

The surrender of Santiago puts an end to the fighting there for the present, at least until punishment has to be meted out to our "chivalrous allies," who seem to be imbued with the political creed "to the victors belong the spoils," and who are very anxious to "go through" the city. This respite from fighting most fortunately enables the medical staff to use all means to prevent the spread of the disease. The camps are being moved up into the hills, isolation camps are being established, and other sanitary precautions, the absence of which left open the gate to the unseen foe, are being taken. We hope, devoutly hope, that it will be possible to check the advance of the pestilence, but there will be little time for anything else than the warfare against disease.

It is found now that two regiments of "immunes" with which the city was to be garrisoned will not be sufficient for its protection. The probability is that a large number of the troops now around Santiago will have to remain there all summer if they can survive the summer. We doubt whether the public know now, or will know, the real conditions that exist among our soldiers in Cuba.

Reviews and Book Motices.

Diseases of the Eye.—By Edward Nettleship, F. R. C. S., Ophthalmic Surgeon at St. Thomas Hospital, London; Surgeon to the Royal London (Moorfields) Ophthalmic Hospital. Revised and Edited by W. T. Holmes Spicer, A. M., M. B., F. R. S. C., Ophthalmic Surgeon to the Metropolitan Hospital and to the Victoria Hospital for Children. Fifth American from the Sixth English Edition. With a Supplement in Color-blindness by William Thompson, M. D., Emeritus Professor of Ophthalmology in the Jefferson Medical College of Philadelphia. Octavo, cloth, pages 528. Lea Brothers & Co., Philadelphia, 1897.

"Nettleship on the Eye" is one of the standard and most popular works on Ophthalmology, especially among general practitioners, in this country. The work is divided into three parts. Part I. is devoted to a study of the various instruments and methods in use in the diagnosis of diseases and irregularities in the eyes. Part II. takes up the various diseases and injuries of the eye, including errors of refraction and accommodation. Part III. treats of diseases of the eye in relation to general disseases. There is a supplement of about thirty pages of instructions for the examination of railway employees as to vision, color-blindness and hearing.

A book which has been through six revisions and editions in England and America must have merit behind it. Such is the case with the work before us The present revision under the hand of Mr. Spicer has been carefully done. The rules for the examination of the eye are plainly laid down and can be easily comprehended by those in general practice. Treatment of disease receives special attention and frequent reference is made to the formulary in the appendix. This formulary will prove very acceptable to those who desire the exact treatment instituted in certain conditions by some of the leading ophthalmologists. The section on the determination of color-blindness will make the work especially useful to railway surgeons who are called upon to examine employees in regard to their vision. Where the views and practice of the author differ to any degree from those of American ophthalmologists, bracketed additions will be found in the text which will clearly set forth American opinions.

Charaka-Samhita.—Translated into English. Published by Avinash Chandra Kaviratna, Eeditor of Charaka-Samhita and of Susruta-Samhita with Commentaries, etc. Parts XVII. and XVIII. 200 Cornwallis Street, Calcutta, India.

The work of translating this ancient medical work goes on, and we always look forward with pleasure to the receipt of a fresh installment of the instructions of the illustrious son of Atri. The two parts include the conclusion of Lessson V. and Lessons VI., VII. and VIII. Lesson V. gives the causes for the vitiation of the ducts, of which it is stated the body is a conglomeration. Lesson VI. The conception of groups of diseases according to the difference of causes. Lesson VII. has reference to the subjective symptoms of disease and their importance. Lesson VIII. tells how disease is to be conquered by the physician.

Review of Current Literature.

OBSTETRICS.

IN CHARGE OF

GEO. GILLETT THOMAS, M.D.,

R. L. PAYNE, M. D.,

THE USE OF ERGOT IN LABOR.—In a recent paper read before the Obstetric Section of the Royal Academy of Medicine, Ireland, Dr. Thos. More Madden reaches the following conclusions, viz:

"Ergot must be used under the following conditions:

- 1. In vertex presentations, and in some breech cases of uterine inertia requiring immediate aid.
- 2. When there is no physical obstacle to the passage of the child, as a large child, a small pelvis, a tumor, etc
- 3. When the os is fully dilated or so readily dilatable that forceps delivery might speedily follow if required.
- 4. That the preparation of ergot used be reliable, and that the dose and method of its administration be judicious.

During the first stage ergot may be used in delay from inertia in which there appears to be no danger to mother or child, or when there is dangerous hemorrhage. During the second stage it may be used after undue delay caused by inertia when there is no impediment to delivery, and to guard against threatening hemorrhage. Its use in the final stage to hasten placental expulsion of the uterus seems inadequate, or to stay bleeding. After placental expulsion it may be used to prevent or stay post-partum bleeding, to cause tonic uterine contraction and thus stay oozing and lessen the danger of sepsis through flaccid orifices, to expel clots or stop after-pains, and to hasten involution, especially in multiparæ."

[In the editor's experience ergot in labor is often a two-edged sword for while it will increase the force of the uterine contractions it often produces continuous, almost tetanic contractions of the uterus and thus increases the danger of lacerations of cervix, vagina and perineum while the child is much more apt to be born asphyxiated. The forceps are much more often indicated in uterine inertia during labor and are much safer to mother and child than ergot. After the use of ergot retained placenta is more frequently present as are also irregular contractions of the uterus, many authorities claiming hour-glass contractions are always due to ergot. Ergot should never be administered as a routine measure.]

AGED PARENTS.—The Medical Council prints the following clipping from the N. Y. Medical Record, viz:

A woman in Toronto who is over 60 years of age gave birth on January 21st to a baby girl. Her husband, to whom she was married seven

years ago, is 78 years of age. The mother had been married twice, and this is her twenty-second child. The day after this, not to be outdone by any foreigner, a woman 65 years old, living in Oklahoma, also gave birth to a baby girl. This mother has also a number of other children, ranging in age from 35 to 45 years. Some of the male sex have as might naturally be supposed, better records than this. A Tyrolese gentleman named Parravicini, is rported to have married at the age of 82 years, and to have been the father of seven children, the last of whom was posthumous, his father having died at the age of 104 years. Juba, King of Mauritania, is believed to have died at the age of 91 years, leaving a posthumous child.

R. L. P.

GYNECOLOGY AND ABDOMINAL SURGERY.

IN CHARGE OF

H. S. LOTT, M. D.,

J. W. Long, M. D.,

HUBERT A. ROYSTER, M. D.

EARLY EVACUATION OF THE BOWELS AFTER ABDOMINAL SECTION.— H. T. Byford (Amer. Jour. of Obstet. and Dis. of Women and Children, July 1, 1898) under the head of "An Improvement in the After-treatment of Peritoneal Section" makes a plea for securing movement of the bowels and passage of flatus immediately after abdominal operations. He thinks that intestinal paralysis or obstruction is more often the cause of fatal sepsis, either wholly or in part, than vice-versa, in many cases the septic matter finding its way through the stretched intestinal walls. His observations have led him to believe that exposure of the peritoneum, handling of the viscera, production of raw surfaces and leaving dead matter (bloody oozing and debris) are followed by intestinal adhesions in from 12 to 36 hours, and that these adhesions produce more or less intestinal paralysis and sometimes obstruction. Many gynecologists have recognized these facts and are always anxious to move the bowels after sections, but these efforts are usually begun too late or are not employed with systematic thoroughness. His routine method: On the day before a peritoneal section, the patient is purged sufficiently to reduce the gaseous distension of the intestinal coils (that they may be kept out of the way during the operation), obtaining as many as 6 or 8 large stools, while patients of relaxed fibre receive full doses of strychnine from the time they first come under observation. Two hours before the operation two teaspoonfuls of the fluid extract of cascara are given. Immediately on awaking from the anaesthetic the patient receives a drachm of magnesium sulphate every hour; at the end of 6 hours a stimulating enema is administered and repeated till gas passes between enemas; then the saline is discontinued. In simple operations, where undue taste is not necessary, the salines and enemas are given a little later. The author presents as presumptive proof of the value of this method a record of 105 consecutive recoveries after peritoneal sections, since its adoption. He claims, not the discovery of a new treatment, but the development and systematizing of an imperfectly recognized one and the demonstration of its value.

H. A. R.

GENERAL SURGERY.

IN CHARGE OF

H. T. Bahnson, M. D., R. L. Gibbon, M. D., J. Howell Way, M. D.

RUPTURE OF GALL-BLADDER; LAPAROTOMY 24 DAYS AFTER INJURY, RECOVERY.—Martin, (Lancet May 21, 1898) reports a case which "proves the rule" as to cases of this injury being fatal. His patient, a lad aged 10 years, was injured by being run over by a cart wheel. When seen shortly after the receipt of the injury decided shock was present. Recovery from this took place with reasonable rapidity the boy being discharged six days later. Shortly afterwards the abdomen again became distended, the stools (clay-colored from the receipt of the injury), continued unchanged in hue, progressive emaciation set in and the boy was returned and re-admitted to the hospital. 24 days after his accident the abdomen was opened and 5 pints of bile-stained fluid found within the peritoneal cavity. The gall-bladder was empty and adhering to the abdominal wall. The insertion of a drainage tube and an uninterrupted recovery conclude the history of the case

RUPTURE OF THE URINARY BLADDER, WITH REPORT OF A CASE OF EXTRAPERITONEAL RUPTURE COMPLICATED WITH FRACTURE OF THE PELVIS.—Is the title of a paper by McLaren (Jour. Am. Med. Assoc'n. June 4, 1898). The injuries were due to the falling of a brick wall and were readily diagnosed. The jagged ends of the fractured pelvic bone being easily felt through the skin in front. Perineal and suprapuble drainage were promptly made, yet despite this a large retro-peritoneal abscess complicated the future history of the case, necessitating drainage in the lumbar region. Recovery was excellent.

J. H. W.

EFFECTS OF THE EXPLOSION OF A SHELL.—Spear, (Med. News, June 4, 1898), reports with interesting detail the injuries resulting from the explosion of a shell on the New York, the vessel being struck by a 14cm. shell at a distance of 5,500 yards. The men who were wounded in detailing their experiences to the surgeon, stated that they felt a hot burning sensation about their wounds, stinging in character but not particularly painful. The fragments of the shell were hot as the clothing was burned around the wounds While of course the wounds were aseptic, yet the bruising and laceration of the surrounding tissues were such that healing was retarded and slow.

J. H. W.

INTESTINAL OBSTRUCTION FROM GALL-STONES; REPORT OF A CASE -Dr. J. P. Lord, (Jour. Am. Med. Assoc'n), at the recent session of the Am. Med. Assoc'n reported the case of a man aged 70 who had suffered for more than a year from symptoms of gastro-intestinal irritation when he was suddenly seized with the symptoms of acute intestinal obstruction. Opiates were given for the relief of the pain which was intense; salts, calomel and enemas were also administered without result until the strength of the patient was very considerably reduced. When first seen by the reporter moderate abdominal distension with tympanites and a small tumor in the region of the sigmoid flexure were noted. Some pain present. Operation was advised and performed. A two inch incision over the swelling was made. The intestine was clamped above and below and surrounded with gauze. A stone the size of a hen's egg was removed. For three days the patient's condition was all that could be desired when a marked rise in temperature set in. The wound was opened up and drainage established. Rapid recovery followed. Examination of the calculus proved it to have a gall-stone as a nucleus. It was composed of fats and bile-salts. J. H. W.

ANEURISM OF THE AORTIC ARCH: LIGATION OF RIGHT CAROTID AND SUBCLAVIAN ARTERIES: REPORT OF A CASE.—Rickets, (Trans. Am. Med. As'n. '98), reported the case of a man, white, age 40, previous history of syphilis, who had suffered with pain for some time in the right infraclavicular region which disabled him from work. On local examination bulging was noticeable, but no bruit. He was placed upon anti-syphilitic treatment and improved. Five months later the symptoms of rickets returned. The bulging of the chest wall was more pronounced than before. Dyspnœa was marked. A well-marked aneurismal bruit was now rapidly noted, but the pain was less than before. Operation was performed by ligating the right carotid and subclavian arteries. Improvement was immediate. The bruit disappeared, the dyspnœa was relieved, the chest resumed its normal shape, a gain in weight and a general improvement in health took place. J. H. W.

CÆCAL HERNIA, WITH A CLASSIFICATION OF SIXTY-THREE CASES.—Dr. Jno. H. Gibbon, of Philadelphia, pleasantly remembered by members of the North Carolina Medical Society, as one of Charlotte: N. C.'s most promising surgeons a few years ago, (Jour. Am. Med. Assoc'n), has with much labor and painstaking research tabulated 63 cases of cecal hernia. Of this number 13 have not previously been reported to the profression. From a study of the cases it is noted that the male sex and early childhood influence favorably the occurrence of the trouble. Most frequent in occurrence is the right inguinal variety, next right femoral, left inguinal, left femoral. In children it seems to be frequently congenital, or there is at least a local weakness which favors its early development after birth. In these cases the etiology of the affection is more readily noted than in cases of adults acquiring the

disease. Pre-existing hernia of the ileum probably frequently drags down the cecum. Treves has directed attention to the decidedly marked mobility of the cecum, and to the fact that in the majority of cases, in direct opposition to what is generally believed to be the rule, there is a complete sac. It has been noted that adhesions between the contents of a cecal hernia are more frequent than in other varieties of hernia. The diagnosis of cecal hernia is very seldom made prior to the opening of the sac-possibly in children and very old people with very thin abdominal walls, palpation may make out the trouble. Coley has made the diagnosis several times in children and he and others have been able to reduce all the hernia except the appendix which being adherent was readily outlined. The treatment of this variety of hernia varies little from that of hernia in general, except, that where the diagnosis is probable an early operation should be resorted to because of the tendency to early strangulation and to appendicular disease as well. The question of the removal of the appendix will depend upon its condition. J. H. W.

FREQUENCY OF VARICOCELE AND THE LIMITATIONS OF OPERAFIVE TREATMENT is the title of an interesting note by Senn, (Phil. Med. Jour. June 18, 1898), in which he details the results of the examination of 9,815 recruits for the volunteer service at Camp Tanner, Ill., during last May. Of the number noted, (9,815), 2,078 were affected with varicocele or 21.17 per cent. He classifies the cases as small, medium, and large varicoceles. Its presence was noted most frequently in the robust, rather than in men of slender build. In by far the greater number of the cases the pathological condition gave rise to absolutely no symptoms of disease: in more than half the cases the men professed ignorance of there being anything abnormal. From this unusually extensive list of cases Senn concludes that vericocele rarely unfits men for military service, and what is of perhaps more importance to the majority of surgeons, that operative treatment is very seldom indicated. He protests against the too great frequency with which surgeons operate for varicocele, believing that varicocele is met with in nearly one man out of four, between the ages of 18 and 30 years, and that it seldom gives rise to any noticeable disturbance, and that the patients who apply for treatment do so in consequence of nervous disturbances entirely separate and independent of the enlarged spermatic veins. In such cases operation is superfluous, provided the surgeon can secure the J. H. W. confidence of the patient.

CARE OF PATIENTS AFTER THE OPERATION FOR APPENDICITIS.—J. M. Barton, M. D., Philadelphia Polyclinic, separates the cases in four groups, (1) where the abscess is opened without entering the peritoneal cavity; (2) where an operation is performed between attacks and no pus is present; (3) where the

general peritoneal cavity is opened and the abscess emptied; (4) where general septic peritonitis exists at the time of operation. In all operations for appendicitis there is but little danger from shock, and none from hemorrhage after the operation is finished. If there is any shock it will readily yield to heat and strychnia. Death is caused by general septic peritonitis. There is some difference in treatment of each class, but speaking generally (not saying anything of the last group) the treatment consists in perfect rest in bed, no food at all for twenty-four hours, and but a limited amount of water. By the third day he can have ordinary diet in moderate amounts, such as soft boiled eggs, stewed chicken or mutton, milk and dried toast, etc. The soiled dressings should be removed once or twice daily, but syringing out of the cavity is not advisable. The stitches may be removed from the seventh to ninth day; at this time the drainage tube (if one has been used) may be shortened and taken out the fifteenth day. There was no hurry about the bowels being opened, and under no circumstances is it advisable to purge for several days. To prevent hernia the wound should be strongly supported from the first by a rubber plaster fitted with tapes, and continued for months.

I. H. W.

Therapeutic Bints.

An Antiseptic Powder for Suppurating Surfaces.—The Gazette Hebdomadaire de Medicine et de Chirurgie gives the following as Schwartz's formula:

Powd. iodoform,
 Powd. salol,
 Bismuth subnitrate,
 Powd. charcoal,
 Powd. cinchona,
 Powd. benzoin, aa equal parts.

M .- N. Y. Medical Journal.

ACNE.—Alcohol, hot tea, coffee, soups, spiced dishes, and starchy vegetables must be interdicted. Moderate exercise enjoined. Menstrual and uterine derangements must be treated. Gastric disturbances and constipation avoided by appropriate measures. Ichthyol as a "vaso-motor steadying" drug should be given in the form of gelatine-coated pills, each containing 2½ grains, to be taken after meals. This dose to be gradually increased.

Local Measures.—Calamine lotions (gr. xx.—3 i—3 i.) with glycerine, lime water, and rose water.

When acne is a prominent feature, sulphur lotions are applicable, or hypochloride of sulphur freshly prepared (3i-3i) to the ounce of lard, with carbonate of potash (gr. v.) and a little almond oil.— J. J. Pringle.—Medical Review of Reviews.

IRRITATIVE DYSPEPSIA:-

Ŗ.	Bism. Subnitr.			
	Mag. carb. levisaa	8		(3 ii.)
	Ac. hydrocyan, dil	2	4	(Mxxxv.)
	Tinct hyoscyami	24		(3 vi.)
	Muc. acac	48		(3 iss.)
	Aq. menth. pip. q. s. ad1	80		(🖁 vi.)

Sig.: A tablespoonful in a little water after meals.—Medical Review of Reviews.

Some Points.—In removing plaster from the hands after the application of plaster casts, it would be well to remember the therapeutical fact that syrup of lime is the strongest solution, and the application of a little sugar to the hands will be found to greatly assist you. The same rule applies to removal of casts

In removing obstruction from hypodermic needles, fill syringe with water, screw on the needle and place in alcohol flame at point of obstruction using some pressure on piston. The steam generated will force out the obstruction. A number of useless needles will be made useful.

In removing adhesive strips which have been used as a dressing, a little ether poured on same will greatly faciliate it by dissolving the glue.

Never allow rubber plaster to come in contact with a surface uncovered by normal skin. Since it cannot be sterilized be heat, it must be considered as being dirty.

Before operating, always find out whether the patient has any malarial history. The discovery of this fact will save you many a bad scare when temperature rises suddenly after operation.—

Ga. Jour. of Med. and Surg.

TREATMENT OF PAINFUL DENTITION.—1. Frequent hot irrigation of the mouth with a solution of the following:

B. Chloralis hydratis, gr. 48. Aq. menth. pip., 3 j.

M. Sig. One teaspoonful to three ounces of hot water for irrigation.

- 2. Gentle friction of the gums with the following mixture:
 - B. Chloroformi, m vij.
 Creosoti pur., m iij.
 Vini opii, m ij.
 Tinct. benzoini, 3 iij.

M. Sig. External use.—Danchez.—N. Y. Polyclinic.

Motes and Items.

Dr. H. J. Thomas, of Winston, has been ordered to Tampa, with ultimate destination Santiago. At the beginning of the war he volunteered as an Acting Assistant Surgeon and was accepted.

Shooting on Doctors.—The Spanish sharp-shooters before Santiago made special marks of the surgeons and wounded men as they were being carried to the rear. Several wounded men were killed and Drs. Danforth and Troval were also murdered in this way. The Spaniards having seized the uniforms of American soldiers who had been killed put them on and secreted themselves in the tree tops, from which place they picked off not only the ambulance corps but wounded men.

REQUIREMENTS FOR THE DEGREE IN MEDICINE—as adopted by the American Medical Association.

At the recent meeting of the Association the following was unanimously adopted:

WHEREAS, the American Medical Association did, at Detroit in 1892, unanimously resolve to demand of all the medical colleges of the United States the adoption and observance of a standard of requirements of all candidates for the degree of doctor of medicine which should in no manner fall below the minimum standard of the Association of American Medical Colleges; and

WHEREAS, this demand was sent officially by the Permanent Secretary to the dean of every medical college in the United States and to every medical journal in the United States, now therefore the American Medical Association gives notice that hereafter no professor or other teacher in, nor any graduate of any medical college in the United States, which shall after January 1, 1899, confer the degree of doctor of medicine or receive such degree on any conditions below the published standard of

the Association of American Medical Colleges, be allowed to register as either delegate or permanent member of this Association.

Resolved, that the Permanent Secretary shall within thirty days after this meeting send a certified copy of these resolutions to the dean of each medical college in the United States and to each medical journal in the United States.

DEATH, SMIT.—On the 28th inst., Amy Jane Mary Smit, eldest daughter of John and William Smit, aged 1 day 2½ hours. The bereaved and heart-broken parents beg to tender their hearty thanks to Dr. Jones for his unremitting attention during the illness of the deceased, and for the moderate brevity of his bill. Also to Mrs. Williams for the loan of clean sheets, to Mr. Wilson for running for the doctor, and to Mr. Robinson for recommending mustard plaster."—American Druggist.

Reading Potices.

THE PROMPT SOLUTION OF TABLETS.

We are glad to know that the Antikamnia people take the precaution to state that when a prompt effect is desired the Antikamnia Tablets should be crushed. It so frequently happens that certain unfavorable influences in the stomach may prevent the prompt solution of tablets that this suggestion is well worth heeding. Antikamnia itself is tasteless, and the crushed tablet can be placed on the tongue and washed down with a swallow of water. Proprietors of other tablets would have had better success if they had given more thought to this question of prompt solubility. Antikamnia and its combination of tablet form are great favorites of ours, not because of their convenience alone, but also because of their therapeutic effects.—The Journal of Practical Medicine.

NERVOUS PROSTRATION.—My son, aged 12, had been growing nervous over the shock of his brother's death, and seemed to derive no benefit from any remedies used in his case. Had him to the sea shore, change of surroundings and everything that could be done for his benefit, he still grew thinner and worse all the time. I put him on Celernia, and had marked benefit before the first bottle was used, and he has almost entirely gotten over it with the help of another bottle I got for him. I consider it a very nice and efficient nervine, just the thing for the children and nervous and delicate persons, where there is great prostration. I shall use it freely.—N. P. Frassoni, M. D., Moosic, Pa.

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Original Communications.

SUB-PERITONEAL MYOMA.

By August Schachner, M. D., Demonstrator of Anatomy in the Louisville Medical College; Visiting Surgeon of the Louisville City Hospital, Etc., Louisville, Ky.

HAVE a tumor that I removed from a woman fifty years of age; she had been married twice, and had I think four children. In addition to this tumor she had an inguinal hernia on the left side. The tumor had been developing for a number years, just how long she was unable to say. It reached almost to the umbilicus. By a vaginal examination I could feel a mass about the size of a man's fist, smooth and round with a constricting band, which made it appear very much as though it might be an inverted uterus, or a submucous fibroid that had grown out through the cervix. Very careful search was made for the cervix through a speculum, but we were unable to locate any cervix, nor anything except this round, hard mass that presented. The tumor was immovable, and diagnosis was made of fibroid of the uterus, possibly one that had grown within the uterus and forced itself partly out through the cervix.

We opened the abdomen and the mass which I show you was presented in the incision; it looked like an ordinary uterine fibroid, apparently sessile. We tried to get it out of the pelvis, but it was only partly gotten out after a great deal of pulling

with forceps and working with the hands of assistants. After getting the tumor out we noticed up in front was the uterus, apparently somewhat atrophied, with the normal ovaries and tubes upon each side. Even after the tumor was partly out of the abdomen, we were very uncertain is to its exact nature; the tumor being quite large and the pelvis small, the entire pelvis was filled. I decided to throw a rubber ligature around the growth, which was done and I cut the tumor away. secting deeper around the tumor, I encountered what appeared to be a cavity behind the growth. I inserted my finger down into the cavity and could sweep it around the mass, but even then I was somewhat in doubt as to where the tumor originated and the exact relation of the parts. I concluded it was best to cut the entire growth away, and after getting it up out of the cavity and finding what seemed to be its capsule, I saw with what I had to deal: I saw that it was a sub-peritoneal fibroid that had grown from behind the uterus into the vagina, lifting-up the uterus in front, lifting up Douglas' cul de sac so that it made the fundus of the vagina very small. It stretched the vagina upward. First I cleansed the abdominal cavity thoroughly, sewed the peritoneum over to its lowest point, then stitched the lower end of Douglas' pouch up until I had entirely closed the peritonial cavity, which, of course, left an open vagina below and a large raw surface. The vagina had been thoroughly cleansed, including douching with peroxide of hydrogen and irrigation with bichloride of mercury beforehand, still I did not care to trust the large raw surface, the vagina being so long, so I sewed it over, then united it up to the abdominal wound, adjusting a hysterectomy pin to hold the sac in such manner that the pin could be withdrawn at any time I thought advisable. All the raw surface above the vagina and below the peritoneum was then filled in with gauze, everything was closed and the patient put to bed.

In the operation I dissected so near the bladder that I was fearful that perhaps I had injured the ureters, but before the end of twenty-four hours I was satisfied everything was right, when she began passing the amount of urine that it is customary for these patients to void in making a perfect recovery. There is now nothing more than a slight sinus left and the patient is sitting up.

The specimen was placed in formaline which is responsible for the hardness of it.

DISCUSSION.

Dr. W. H. Wathen:-I have not had time to examine the specimen sufficiently to give any weight to the remarks I might make bearing upon the case. I do not believe that this tumor is vaginal. I do not see how it could possibly be the vagina that we see covering the upper part of the growth. The tumor was all covered with membrane of some sort; if it be the vagina then this tumor must have grown down first into the vagina, then gone up into Douglas' pouch, and the vagina would not have been taken with it. It is a retro-peritoneal fibroid tumor, arising in the lower part of the neck of the uterus above the vagina, separating the peritoneum from the posterior sacral cavity, and extending upward, gradually unfolding the peritoneum as was made necessary by growth of the tumor behind the uterus. Very often these tumors will go under the rectum, untolding the mesentery of the sigmoid flexure of the colon, with the colon lying directly upon the tumor; they will sometimes go under the cecum, with the cecum lying directly upon the tumor; this is not at all uncommon. We may have intraligamentous tumors which go into the folds of the broad ligament on one or both sides; again going behind the broad ligaments; just as we have also in those tumors arising in the hilum of the ovary which burrow down into the folds of the broad ligament, dipping into all the structures and separating the peritoneum in any direction. Whenever this occurs, let it be a cystic tumor arising in the hilum of the ovary, or let it be a myomatous tumor arising in the neck of the uterus, we always have the same thickened condition of the investing membrane called the capsule that we see in the tumor before us. peritoneal structures usually carry an increased development of muscle fibres in this tissue. If in this case the abdomen had been opened by a vertical incision just above the fundus of the uterus, and the capsule incised, the entire tumor could have been enucleated by running your hand under it, leaving its capsule attached to the uterus. I think the explanation Dr. Schachner has given, that the investing membrane is the vagina, and the explanation as to how the growth occurred, is simply impossible. It could not occur. I think I can take the specimen and convince him that it is an utter impossibility for the condition to have occurred as he has described, and demonstrate that it is simply a retro peritoneal myomatous tumor, arising in the lower part of the neck of the uterus, becoming practically separated from the uterus, as they often do. They start as a sessile form of tumor, growing larger and larger, finally becoming separated from the uterus. I doubt if we have uterine myomata developing in the broad ligaments, though we find occasionally a myomatous tumor that is absolutely in the broad ligament. I believe these tumors originally arise in the neck of the uterus, and as they grow unfold the broad ligaments, gradually becoming larger, the uterine contraction narrowing the base of the tumor so that the pedicle becomes small and finally they become nearly separated from the uterus. Myomatous tumors in the folds of the broad ligaments, claimed to have arisen there, were primarily uterine myomata.

Dr. T. P. Satterwhite:—In a digital examination how do you account for the tumor being so distinct in the vagina; would it

cause attenuation of the walls of the vagina?

Dr. Wathen:—With a vaginal capsule the tumor would by a digital examination be just as perceptible as though there was no vagina over it. Or this tumor may have protruded down into the vagina from the uterine tissue itself.

Dr. W. C. Dugan:-I agree with Dr. Wathen; I do not believe a vaginal fibroid of this size is a possibility. Dr. Schachner's explanation does not explain it in my judgment. This is a sub-peritoneal fibroid; in my mind there can be no doubt about it. It undoubtedly arose in the lower part of the body or about the junction of it with the cervix, one portion extending down the posterior wall of the vagina, another extending in an upward direction lifting up Douglas' pouch. do not think it is vaginal at all, but has simply pushed down the top of the vagina, the vagina covering the lower part of the tumor, the upper portion being covered with Douglas' cul de It has simply separated the vagina below and Douglas' pouch above. In the vaginal examination the doctor simply felt the part which had encroached upon the vagina, the vaginal wall intervening. We know that a fibroid tumor may so encroach upon the vagina as to make almost complete atresia vaginæ from pressure above. I think Dr. Schachner will come to the same conclusion when he makes a careful dissection: I am sure he will be convinced of his mistake in stating that this is a vaginal tumor.

Dr. Louis Frank:—Dr. Schachner certainly ought to know from what structure this tumor sprang, but I am inclined to the view expressed by Doctors Wathen and Dugan. If this tumor sprang from the Douglas' pouch, it must be extra-vaginal; it must have pushed the vagina down with it. Unless it sprang from the posterior lip of the cervix inside the vagina, it could not have pushed the vagina up; it would be an impossibility. If the tumor sprang from the uterus outside the vagina, it could not push the vagina upward; it could not reflect the vagina over it.

Dr. August Schachner:—I admit there is some room for guess-work as to from what structure this tumor sprang; I think,

however, that it sprang from the point of vaginal attachment to the posterior portion or the cervix, and grew partly into the vagina and then in some way took what represented Douglas' pouch and pushed it up behind the tumor, and the portion which represents the hood of the tumor is the pushed-up Douglas' pouch. The hood represents not only the retro-peri toneal fold, but also the upper part of the vagina which has been carried upward by the growth of the tumor. Of course after a tumor has been removed, it is very easy to say what should have been done at the time of the operation. The case is an extremely interesting one, and I may be mistaken in what I have said concerning it, but I do not think so.

Dr. Frank:—How is it possible to have a tumor which is re-

tro peritoneal and intra-vaginal at the same time?

Dr. Schachner:—I take it that this tumor originated where the vagina is attached to the uterus, that it grew down into the vagina, then in growing upward the vagina was pushed up with it.

MULTIPLE PREGNANCY.*

By J. EMMETT SEBRELL, M. D., Courtland, Va.

N submitting the following sketch it is not inappropriate to say that the singularity of this case and the absence of any parallel thereto, recorded in any of the medical authorities which I have seen, suggests the skepticism with which it may be received by the fraternity. I therefore preface its presentation by stating that while I was not present at either accouchement, I have no doubt as to the facts as recited to me by intelligent ladies who were in attendance, and were thoroughly conversant with every phase of the first and second accouchement, and knew and saw daily the mother during the intervening time. Mrs. G., from whom I elicited these facts, has been, during the past several years, among my patients and patrons, and I can vouch for her veracity and entire freedom from anything that partakes of exaggeration or sensationalism. The mother in this case was related to Mrs. G., and was sojourning at her house when the children were born:

Mrs. J., white, multipara, aet. 38. weighing about 125 lbs., medium proportions, rather plethoric, was taken with her fifth

^{*}Read before the Tidewater Medical Association, July 14, 1898.

labor on the afternoon of November 28th, 1890, and after six or eight hours gave birth to a fully developed, but small, male child, weighing about four pounds. This labor was not attended with much suffering, until the last expulsive pains, which were severe and powerful. She suffered no after pains as was usual with her previous labors, and only complained of her bowels being sore, and requested her lady friends present to rub her bowels "good and hard" with camphor, which request was readily acceded to, amounting almost, I infer from what these lady friends informed me, to a "kneading" of the womb. The lochial discharge continued one week, but was very pale and scanty. There was no perceptible reduction in the size of her abdomen after the birth of her child and the delivery of the placenta, and she positively contended that there was another child in utero, having the two previous labors to this confinement given birth to twins; but the midwife who was with her was equally as positive that there was not another baby, and so tried to impress her, but without effect. She kept her bed about a week, and, I suppose on account of her poverty, she having no one to wait on her or attend to her domestic duties, managed to get out of bed and seemingly as well as she had ever been after her previous confinements, with the exception of the enlarged condition of her abdomen, which the midwite thought was due to a tumor, and which alarmed her relatives and neighbors, but which the mother continued to say was due to another fœtus, and that time would prove her assertion. she lost comparatively no blood in this labor she rapidly regained her former good health and strength, and after two or three weeks exercise in her own room and about her domestic affairs, she was able to visit her near neighbors, about a half mile distant, on foot. There was no secretion of milk up to this time and she had no trouble whatever with her breasts. Her abdomen continued to increase in size until without any premonitory symptoms of another labor, except the enlargement of her abdomen, she felt a sudden gush of water from her womb which revealed the fact that she was then entering into a second labor, and with each slight pain thereafter the liquor amnii continued to flow all through the day and night, until on the morning of the second day of January, 1891, when her pains became intense, she gave birth to another child, female,

weighing about five pounds, which was fully developed and to all appearances a perfectly hearty and healthy babe. Both labors were comparatively easy and devoid of much suffering, being natural vortex presentations. She suffered with after pains for two days after the birth of the second child, after which she made a steady and complete recovery, and has since given birth to two children at separate times.

The first child lived about four hours and cried incessantly until death. The second child lived two weeks, nursed heartily the first week and without any known cause was seized with convulsions, which lasted through several days prior to death.

The singularity of this case is the length of time intervening between the births of the first and second child, it having been thirty-four days, also that in each of her two previous confinements she had given birth to twins.

I shall congratulate myselt if my report of the case shall elicit such discussion by the Association as will explain what I must confess is now clothed in doubt and uncertainty.

Society Reports.

NEW YORK ACADEMY OF MEDICINE.

SECTION IN ORPHOPÆDIC SURGERY, Meeting of March 18th, 1898.

LATERAL CURVATURE OF THE SPINE TREATED BY FORCIBLE REDUCTION.

Dr. Gibney presented a patient, a girl 14 years of age affected with lateral curvature whose parents had urged that something be done to correct the deformity, being willing even to have a section done. Under an anaesthetic a twisting motion was employed for some 5 or 10 minutes and the patient was then put into plaster of paris. She was treated three times. There had been no reaction. She had gained 13/4 in, in height and the back was in a much better position than it had been before.

AN UNUSUAL CASE OF POTT'S DISEASE.

Dr. Townsend presented a patient in whom the deformity had not been attended by symptoms. The patient was a girl

11 years of age. Two weeks ago the mother, when giving the child a bath, had for the first time noticed a projection, which, on examination, was found to be at the 10th and 11th dorsal vertebrae, and so sharp that the case did not seem to be favora able one for forcible reduction. The child was in good health and had no pain or other symptom and no history of illness. She was extremely active and could stand any amount of jarring. Excepting near the kyphos the spine was very flexible. There was also at the site of the projection a slight deviation to the right but no sign of rotation.

Dr. Gibney recalled the case of a patient who, without pain and with no history of symptoms, presented a similar deformity of apparently rachitic origin. He had intended to apply forcible reduction.

CERVICAL ABSCESSES COMPLICATING POTT'S DISEASE.

- Dr. Myers presented a boy 7 years of age with Pott's disease of the 3rd and 4th dorsal vertebræ complicated with an abscess discharging in the neck behind the sterno-cleido mastoid muscle. The treatment had illustrated the effect of the supine position in securing good drainage. The spine had been protected by a brace, but the discharge was profuse and the temperature varied between 100 and 103°. When he was placed supine in bed without a pillow in two weeks the temperature dropped 2 degrees. He was then allowed to leave his bed and the temperature soon rose to the former level. He was then returned to bed and the temperature subsided as before. The discharge gradually decreased and when it had nearly ceased he was allowed to be up. His general health was entirely restored and there had been no discharge for several months.
- Dr. Townsend presented a girl 3 years of age with Pott's disease of the upper cervical vertebræ. There was an abscess the size of a hen's egg extending around the outer side of the sterno-cleido-mastoid, about half being deepseated, the remainder superficial. Two-thirds of the abscess was posterior to the muscle and over the swelling were a number of enlarged veins. The patient had been put on a frame and the abscess would be opened without undue delay by an incision back of the muscle.
- Dr. Phelps urged the importance in similar cases of early operation to prevent rupture into the pharynx and the occur-

wence of tuberculosis from the flowing of the infective material into the larynx during sleep.

MALIGNANT DISEASE OF THE SPINE.

Dr. Taylor presented a man 47 years of age, in poor general condition and giving a history of very severe pain in the lower part of the back for eight months. In that time he had lost much flesh and had been disabled by limitation of motion in the lumbar region of the spine and difficulty in locomotion and other movements of the body. The upper part of the back was rounded and the spine of the first lumbar vertebra was prominent and deviated to the left. There was a well-defined area of sweating in the right loin probably from invasion of a sympathetic ganglion and vaso-motor paresis. This symptom was not present in tubercular disease of the spine, but he had observed it before in malignant spinal disease. Partial relief would probably follow the application of a jacket, and morphine would be given to control the pain.

Dr. Sayre suggested the use of the actual cautery to temporarily relieve the pain.

APPARATUS FOR FORCIBLE EXTENSION.

Dr. Elliott exhibited an instrument which he had devised for forcible extension, especially for the reduction of the congenitally dislocated hip. It was light and inexpensive and consisted of a small rectangular frame about 6 in. wide and 15 in. long. In the centre of the long axis was an extension screw. To a crossbar on this extension screw was attached preferably the ends of a skein of yarn which had previously been adjusted to the ankle of the patient. The frame could be affixed to any table or bed and the force employed, the patient being firmly held by an assistant, could be regulated at will and, if desired, measured in pounds. The instrument, besides being used for reduction of dislocation of the hip as described, could also be conveniently used in forcible reduction of the spinal column in cases of angular curvature, the proper adjustments being easily made.

MEETING OF APRIL 22, 1898.

THE TREATMENT OF RACHITIC DEFORMITIES.

Dr. R. H. Sayre read a paper with this title, of which the following is an abstract:

"Patients affected with well marked rachitic deformities would not "outgrow" them. Treatment should be active and should vary with the pathological stages of the affection. In acute rickets cod liver oil would be of great benefit and phosphorus ir the Elixir of the National Formulary would yield good results, given three times a day in doses as large as the 50th of a grain. When the bones are soft they should be subjected to manipulation and the child should be kept in the recumbent position, which is best done, if there are spinal deviations which require special attention, by the use of the wire cuirass. The two great and of fresh air and sunshine would thus be invoked and would be not less effective than treatment by the use of drugs. Instruments should be applied in order to retain the improved position secured by manipulation. In decided knock knee or bow-legs if the bones are not too hard, the deformity might be corrected by the plaster of paris bandage changed in shape and in the degree of its pressure from time to time by cutting out a section of the plaster at the point of greatest deviation, inserting a wedge in the cut and applying additional plaster to retain what is gained. In similar cases of coxa vara depending on a rachitic process in adolescence the deformity could be overcome by traction in the recumbent position. When eburnation was established efforts to correct deformity by manipulation or by instruments would be a waste of time and the osteoclast or the chisel should be used, the latter when the division was to be made near a joint, and the former when the force was to be applied at a point an inch or more removed from a joint. In some extremely rachitic subjects non-union followed an operation from delayed formation of new bone cells due to eburnation and impaired nutrition. A not uncommon manifestation of rickets was seen in pigeon-toes, the result of an instinctive turning in of the toes to avoid receiving the weight of the body directly on the weakened tissues of the foot. Injudicious efforts to induce the toes to turn out might lead to flat-foot and increase the usually present tendency to knockknee."

Dr S. Ketch had used phosphorus in the treatment of rickets for 20 years with excellent results. He preferred a compound syrup of hypophosphites containing lime, iron, potash and soda without strichnine. Manual force was of benefit in nearly all cases, especially when the patients were off their feet. When they began to walk, gratifying results would follow the employment of the usual bow-leg and knock-knee apparatus. Unless there were exceptional reasons for protecting the spine, he would not use any restraining apparatus like the cuirass for recumbent patients. Time should not be wasted in waiting for the patient to "grow out" of the deformity.

- Dr. A. M. Phelps said that at the beginning of the treatment the patient should be taken off his feet and if the bones were not hard we should bend the bones, producing perhaps a greenstick fracture and thus straighten them by manual force. Bones that had become sclerotic required osteoclasis or osteotomy. The latter should never be done in children under 12 years of age unless demanded by some unusual condition, and in all cases osteoclasis should as a rule, be preferred to osteotomy. Non-union was found only after osteotomy and it was attended with some danger, deaths have been reported, whereas, these accidents never occured from osteoclasis.
- Dr. Ketch opposed operative procedure in the early stage. The experience of the past and of the present day showed that manual force and mechanical treatment were sufficient to effect a cure. A speedy rectification of the deformity was misleading because the time required by the mechanical treatment after the operations had been done. In no way except mechanically, could the child be protected against a return of the deformity.
- Dr. A. B. Judson said that in orthopædic practice operations should as a rule be avoided. The patients were children and the question of time was unimportant. If pressure were applied in the direction opposite to the deformity and due time and attention were given, the natural growth was a curative agent. If treatment were begun early and the patients were taken off their feet the deformities of rickets especially were curable by mechanical methods alone.
- Dr. R. Whitman said that the slight deformities of children should receive more attention than was customary. He had observed that pigeon toes were as a rule symptomatic of rachitic knock knee or flat foot and represented an effort of Nature to restrain deformity. Many cases of coxa vara had their origin in infantile rickets. The deformity of the femoral neck was latent in childhood. During adolescence the neck, being from its depression subjected to greater strain, gave way and deformity and disability followed. In the same way adolescent knock-knee was in many instances an exaggeration of a slight deformity in infancy. In extreme cases of coxa vara he thought that restoration of abduction by division of the neck of the femur was generally required and that in any kind of a case simple extension would not often be effective.

Dr. C. N. Dowd said that after osteotomy above the femoral condyles he had found that the corrected position could be perfectly maintained by carrying the plaster of paris to the upper part of the thigh instead of enclosing the thorax. A towel was put between the knees and the feet were tied together. Cleanliness was thus promoted and the children sat up in bed, ate in comfort from a tray and could play with toys without interfering with treatment during the period when the bone was uniting.

Dr. Whitman preferred the double spica of plaster of paris which insured absolute fixation and in the routine of hospital treatment had not entailed undue inconvenience or unpleasant consequences.

Dr. Saye said that an early diagnosis followed at once by active treatment when the tissues were soft and ready to yield to moderate pressure would prevent a great deal of trouble at a later stage when eburnation would require that the deformity be reduced by forcible procedures. He thought that a child could not be kept in bed very well without some little apparatus. the cuirass was objectionable, put on a pinafore and fasten it here and there to the bed and thus bring the child to anchor. In serious cases the cuirass or Bradford's frame were a great convenience. Children in them are like little wooden images and they live in them for 2 or 3 years, are happy and comfortable and have their toilet made without any great bother to the nurses. Apparatus was very useful to hold the bones in position after they had been brought to a straight position but to bring them to a straight position apparatus was not nearly so efficient as putting them up in plaster of paris. It was simply a question of leverage, and he had found that leverage was more accurately applied by the use of plaster of paris than by any other means.

A SPECIMEN OF CONGENITALLY DISLOCATED HIP.

Dr. G. R. Elliott exhibited a specimen which was removed from a child 7 years of age. It showed congenital dislocation of the right hip. During life there was 1 inch of shortening of the right lower extremity with eversion. Post mortem findings: Gluteal group of muscles somewhat shortened. Pyriformis muscle ½ inch shorter than its fellow, and reduced to a tendi-

J. W. P. S.

nous band. Adductor group of muscles somewhat atrophied. The neck of the femur of the affected side was very short, the upper part of the bone consisting chiefly of head and great trochanter. Displacement upward and forward. Capsule thickened, shortened and intact. Head of bone fairly normal and synovial surface in good condition. Ligamentum teres lengthened but size apparently normal. Acetabulum to be examined and reported upon later.

Acute Meningitis.—In May's issue of Langsdale's Clinic, Dr. C. S. Merriam writes upon this trouble. He says that the disease usually has a prodromal stage. The child is cross and fretful and any attempt to amuse irritates it very much. There is rigidity of the muscles of the neck and spine, and the child prefers to lie on its side, and bores the pillow with its head. If the patient is a young child the fontanell is full and tense. pulsating later on. The conjunctivæ are congested and the eyes are rolled upward, tongue is tremulous and very red on edges and tip. Vomiting without nausea, and constipation are present. At first the pain is very great, but later on when unconsciousness sets in it is not so prominent. Fever is always present. The large death rate, he believes, is due to two things; first, the early symptoms are not observed or recognized; and second, the treatment is not as heroic as it should be. heres to the theory that the contagion is carried by the blood current. He states that the treatment depends largely upon an early diagnosis, and its aim should always be to abort the dis-Morphia, acetanilid, and calomel are recommended as the most valuable remedies, though ergot, bromides, gelsemim, hyoscyamus, and the cap are useful remedies. As soon as there is positive evidence of exudation, it should be drained off by trephining through the cerebellar fossa of the occipital bone. He does advise the lumbar puncture. No matter what treatment is instituted, if rational, it should be pushed vigorously.

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Editorial.

A PATENT ON DIPHTHERIA ANTITOXIN.

Since the demonstration of the fact, by Jenner that inoculation with the virus of cowpox rendered immune against small-pox the person inoculated, no discovery has been hailed with more satisfaction by the profession than the curative power in diphtheria of the serum of an animal which has been rendered immune by the graduated inoculation with the bacillus of diphtheria and its toxins. Received with caution at first, experience has shown it to be an absolute specific in the disease caused by the bacillus of Löeffler, and its manufacture has been under taken by a number of private concerns and by four or five boards of health in the United States.

It seems almost incredible that Professor Emil Behring, who took such an important part in pefecting the application of the principle to the relief of human suffering, should have allowed himself to be so influenced by the baser motives of personal gain that he should have sought or permitted the issue of a patent on the remedy in his name; but we are informed by Messrs. Parke, Davis & Co., who were among the earliest to produce the serum in this country, that a patent has been granted by the Board of Appeals in Washington, to Professor Behring, on the sole consideration that his work had helped to reduce the diphtheria mortality.

Professor Behring thus describes his invention:

"I. A process 'of producing diphtheria antitoxin which consists of inoculating horses and other animals capable of being infected with repeated doses of diphtheria poison or living diphtheria bacilli of gradually increasing quantity and strength so as to immunize them and form in the blood a counter poison for destroying the poison secreted by said bacilli, drawing off the blood from said animals, separating the serum from the blood corpuscles, and concentrating the former for use substantially as set forth.

"2. As a new substance, diphtheria antitoxin, consisting of the concentrated serum of the blood of animals treated with diphtheria poison and having the characteristic of immunizing test animals against infection with dephtheria, and curing them when artificially infected with diphtheria, said serum containing a counter-poison having the property of destroying the poison secreted by the diphtheria bacilli substantially as set forth."

Notice has been served on all the manufacturers of antitoxins in this country by the Hoechst Farbwerke, manufacturers of the Behring antitoxine, to discontinue the production and sale of antitoxine, they claiming the sole right, under the patent granted Professor Behring, to sell antitoxine in the United States. Thus we see a foreign corporation granted a monopoly in this country on a product which directly affects the lives of our people; and this, too, in the face of the fact that such a privilege could not be obtained by them in their own country, where patents are not granted on medicines and foods save on the process of manufacture. It would be well were our own patent laws so amended that it would be impossible for avaricious men to thus interfere with the munificent results that should follow all discoveries which tend to the amelioration of human suffering.

It was the effort on the part of Dr. Morton to secure a patent on sulphuric ether, under the name of "letheon" which branded forever his character, and tempts honest philanthropists to deprive him of the honor which is justly his. Now is the fair form of another idol disfigured with the spirit of commercialism, and the medical and scientific world are called upon to suffer a keen disappointment in the man whom they had come to honor and respect.

In seeking a patent on diphtheria antitoxin, Professor Behring neglects the rights of those other investigators who worked before and with him, and appropriates to himself their labors. The principle of immunization against diphtheria as it has been finally evolved, is not the work of any one man, but of a number of workers who contributed each his own part to the final result. Pasteur, in 1880, found that animals inoculated with cultures weakened by age, heat or exposure to the atmosphere, would have a mild attack of the disease and were thereafter immune. He worked with the germs themselves. In 1886, Salmon and Smith succeeded in immunizing pigeons against the germs of hog cholera by previous injections of the sterilized cultures of these germs. Similar results were reported by Roux in 1888 with anthrax. In 1888 Löeffler showed that a pig which was inoculated with diphtheria, was immune, after recovery, against repeated inoculations with a virulent culture. The results obtained by C. Fraenkel on the immunization of animals against diphtheria were published December 3, 1890, and on the day following Behring and Kitasato published their results on immunization against dightheria and tetanus. Thus we see that Professor Behring, in appropriating to himself all the credit for the invention of antitoxine is giving his critics cause for censure for other reasons than violated ethics; he is appropriating what is not his.

Should this patent be sustained and this country be restricted entirely to the use of the preparation made by the agents of Professor Behring, it would inflict an incalculable injury on the people of our land. This German corporation would be virtually holding in their hands the lives of thousands of our children sick with diphtheria, would say to us "Give us our price." We cannot believe that the courts of our country would uphold such a preposterous claim. We are authorized by Messrs. Parke,

Davis & Co. to assure the profession full protection in the use of their preparation, should the patentee attempt any intimidation.

Satan showed him all the kingdoms of the earth, and the glory of them (gold), and Behring did not say to him "get thee behind me, Satan," but he fell down at his feet and worshipped him. What a pity!

Reviews and Book Motices.

The Care and Feeding of Children.—A Catechism for the Use of Mothers and Children's Nurses. By L. Emmett Holt, M. D., Professor of Diseases of Children in the New York Polyclinic; Attending Physician to the Babies' Hospital and the Nursery and Child's Hospital, New York. Second edition, revised and enlarged. D. Appleton & Co., New York, 1897.

This little volume has not been previously reviewed, simply on account of the fact that, upon its receipt, it was confiscated by the manager of the home nursery, and so lost sight of for As intimated in the title, it is in the form of questions and answers, and beginning with the first duties to the child at the time of its birth, follows it through the earlier years of life, instructing the mother or nurse in the little daily cares which the infant demands. It would be much better for a young mother to have and study this volume, which she can easily understand, than to depend upon the traditions that are volunteered by the old midwife, or even the intelligent grandmother. There are many things contained in the work which are too insignificant to be given a place in the more pretentious books, but which the physician will be expected to know and to be able to impart to his patient. The young physician is often at a loss to answer many of the questions in regard to the minor matters which relate to the baby, because of his lack of This little book will supply an answer for nearly experience. any question that may arise.

Brief Essays on Orthopaedic Surgery, Including a consideration of its relation to general surgery, its future demands, and its operative as well as its mechanical aspects, with remarks on Specialism. By Newton M. Shaffer, M. D., Surgeon-in-chief to the New

York Othopædic Dispensary and Hospital, etc., etc. D. Appleton & Co., New York, 1898.

This volume comprises a series of essays which have appeared from time to time in one or another of the medical journals of the country. The essays, seven in number, deal altogether with the sentimental part of the specialty, and express the author's views as to the status of orthopædic surgery, and its relation to general surgery.

Review of Current Literature.

OBSTETRICS.

IN CHARGE OF

GEO. GILLETT THOMAS, M.D.,

R. L. PAYNE, M. D.

THE THERAPEUTICS OF PARTURITION.—Under this heading Dr. C. E. Ide, Chicago, Ill., in a late number of the Medical Council, presents the following article, which so well represents the dosmetric method of treating the complications of pregnancy and parturition, that it is given in its entirety:

There are many annoying conditions which may arise during pregnancy to rob prospective motherhood of its joy and satisfaction, and vest it with an aspect as terrible as that of disease itself. These we would seek to remove as simply and expeditiously as possible, one by one, asthey appear, not allowing them to accumulate until our patient is worn out and in a serious condition. In fact it is well to forestall these annoyances, and institute, by the end of the third month of pregnancy, such mild and simple, though accurate and sufficient, treatment as will make the condition a comfortable and normal one, and stimulate vital functions. And we can believe that, while we thus benefit the mother, we also surround her child with those conditions which conduce to normal, perfect development and function. In addition to this we should watch the urine, not depending upon the presence or absence of albumen alone, but considering quantity and contents, and not stopping here, make a microscopic examination once a week. This will avert many an unfortunate accident, and give us mental comfort and satisfaction.

These being our conclusions, how shall we go to work to fulfill them? Not, surely, by seeking some panacea which will, once for all, remove all chance of the appearance of uncomfortable conditions; not, indeed, by attempting to find one line of treatment powerful to cure or prevent all; not by becoming disgusted or discouraged and giving up altogether. No. But, believing that in quietness and confidence

shall be our strength, by directing to each untoward condition which arises its own antagonist, provided for us by the constancy and assiduity of faithful minds and hands.

To take up certain conditions in detail, and consider their proper treatment: How shall we make pregnancy comfortable and normal and stimulate vital functions? Why, by providing the cells and organs by which those functions are performed with food and tonics. We can prescribe, for instance (especially during the last three months of pregnancy), strychnine arseniate, gr. $\frac{1}{134}$, every four hours, as a vital incitant, and iron arseniate, gr. $\frac{1}{6}$, three to six times a day, or iron lemonade, to replace the waste of albumen and blood corpuscles: and these dosimetrically, that is, in small doses frequently repeated, that the desired physiologic effect only may be attained, and no overstimulation or exhaustion, the very opposite of what we desire, produced.

From the fourth to the sixth or seventh month, the time of most rapid development in the bony framework of the fetus, if we provide the fetus with some form of lime, through the mother's circulation, there will be so much less drain upon her tissues. We can do this, and provide some phosphorus at the same time, by administering the glycerophosphate of calcium, gr. 3 to 5, three times a day. Another means of providing phosphorus is by the administration of phosphoric lemonade, gr. $\frac{1}{6}$, dissolved in water, several times a day, for the thirst which sometimes all but consumes the woman.

For the irritability of the bladder, which is often very annoying in the early weeks of pregnancy, nothing is better than benzoic acid or benzoate of lithium, gr. $\frac{1}{2}$, in water, frequently. If necessary, some hyoscyamine, gr. $\frac{1}{2}$, every hour until the desired effect is produced

The number of remedies which have been recommended for reflex nausea, which is so common that every woman expects her pregnancy to be characterized by it, proves to us that there are some cases which cannot be relieved medicinally. For those which can there is nothing better than cerium or silver salts; with small doses of cocaine (hypodermically) added, if necessary.

Constipation, the common foe of womankind, is here universally present except in unusual cases of well-regulated bowels, or those from which there are frequent movements, the result of chronic disease. Constipation is frequently the cause of the nausea which it is sought to relieve with remedies directed to the stomach locally. Autointoxication results from this constipation, with headache, vertigo, ocular disturbance, foul tongue, tinnitus, dyspnea, palpitation, abdominal distress, pelvic pain and dysuria, or frequent micturition. The best remedy for this, and one which will serve to quiet and sweeten the stomach, is an effervescent saline laxative. It is harmless, acts promptly, is not unpleasant to take, and produces just what we want, a fluid movement which can pass through a compressed rectum and carry out with it those toxic products which often play a large part in the causation of hydraheaded eclampsia.

Anemonin, a camphor derived from pulsatilla, is administered with good effect, in dose of gr. $\frac{1}{134}$ every two hours, in the flatulence and flushes which prove so annoying, disturbing respiration and the heart, often provoking nausea and causing great abdominal distress. This agent also has special reference to the generative function, which it strengthens. If given in small doses there is no danger of its conducing to abortion.

Pica, the morbid craving for unnatural food, a condition not easily explained or done away with, is often successfully treated with hyoscyamine. In addition to this, the woman is to be allowed all forms of food or drink she craves which can with reason be given her. I once heard Professor McLane exclaim: "Give her almost anything she craves, even beer."

For the woman who "feels as if she should fly" all the time or at intervals, nothing is better than macrotin, in dose of gr. 1 every two or three hours. This "braces up" the sympathetic nervous system and removes congestion from the various nerve centers. Its effect is increased if combined with strychnine.

Dropsies arising from pregnancy are readily dissipated with apocynin unless they be due to organic disease of the heart, liver, or kidneys; in which ease the best thing to do is to obtain consultation, so as to share the responsibility with a brother practitioner, and induce labor, or, if earlier, produce abortion. A child born of a mother with such organic disease is not desirable to a family, society or State. If the dropsy is coupled with vertigo and tinnitus, administer iron with a view to relieving coexisting anemia, or, better, hydremia (plethora); and then give a saline laxative to remove all toxins resulting from the conscipation which usually accompanies both pregnancy and anemia. If the dizziness still persists, think of organic disease, in the absence of marked indigestion, or ocular disease.

As we remarked above, it is important to keep the urine constantly in mind, watching the excretions of solids by the kidneys with care. The kidneys of the pregnant woman are greatly overworked, as is evidenced by the permanent damage frequently done them at that time. We should assist them all we can, and to this end can well administer colchicine, gr. $\frac{1}{134}$, five or six times in twenty-four hours, which has a powerful action in increasing the solids in the urine, especially when combined with caffeine arseniate.

In the fatigue, debility and somnolence which we often meet toward the close of pregnancy, the heart should be sustained with the "dosimetric trinity" granule, which is composed of digitalin (Germanic); gr. $\frac{1}{67}$, aconitine (amorphous), gr. $\frac{1}{134}$, and strychnine arseniate, gr. $\frac{1}{134}$. It strengthens and slows the heart, without producing too great blood tension, quickens the circulation, stimulates nutrition and brightens the whole aspect of the case.

When we feel that some form of inflammation threatens, or there are distended veins in any portion of the body, the resulting congestion clogging the circulation, we cannot do better than employ the "defervescent compound" granules, composed of digitalin and aconitine as in the above, with veratrine, gr. $\frac{1}{13}$, in place of the strychnine. This strengthens and quiets the heart, and at the same time, "bleeds the patient into her own arteries," removing the surplus blood from the venous system.

Last, but not least, by any means, nucleine (Aulde), gr. \(\frac{1}{2} \), every two or four hours, is an excellent reconstructive adapted to all the above conditions, and administered with the utmost propriety in every case where we wish to stimulate each cell to full performance of its function.

So much for our prophylaxis. And, having been assiduous in our attention through pregnancy, we should not fail amidst the perils of childbirth. We can do much to facilitate labor, and easily and simply too. When the pains are cramp-like and distressing, when nerve energy and muscular power fail, when the os uteri is still firm and fails to dilate in spite of the rhythmic pains, and the woman is becoming exhausted and pleads: "Let me alone; let me die;" or when there is inertia, with no attempt at headway, just give the patient three granules of strychnine arseniate, gr $\frac{1}{184}$. and of hyoscyamine, gr. $\frac{1}{280}$ (the dose should be large and fearless), and repeat in an hour if needed. After the granules have been dissolved on the tongue, the effect will be prompt and surprising. The pains will continue strong, regular and effective, from the well-known stimulating effect of the strychnine upon the longitudinal muscle fiber and the cerebrospinal system; they will lose their cramp-like and distressing character, and the circular fibers of the cervix and lower segment of the uterus will relax, from the effect of the hyoscyamine on circular muscle fiber; nerve energy will return; muscular power will come up to par, and the patient will feel refreshed, as after sleep. Not the least of the good effect of this treatment is a quieting of the mind, together with the whole nervous system. Anxiety gives way to confidence, despair gives way to hopefulness, and if it be not a case of impacted head, the end will

An anesthetic is an important essential in the treatment of those accidents which are bound to occur, from time to time, in labor. Its use is to be entered upon fearlessly and boldly, wherever indicated. The anesthetic which is particularly indicated in this class of cases which we are considering is chloroform. It is safe, can be made as safe as ether, if we first inform ourselves as to the true cause of death in cases which succumb to its influence. The day of argument pro and con, as to whether heart paralysis or respiratory paralysis is the cause of death in such cases has passed. We now know, without question, that the cause of death from chloroform is vasomotor paralysis; that is, the chloroform paralyzes the vasomotor system so that the capillaries of the body dilate to the extent of containing so much blood that the vital centers are deprived of their necessary blood supply, and so of their

pabulum. Hence we lower the head and elevate the extremities, in collapse from chloroform, performing artificial respiration until sufficient blood has returned to the vital centers in the medulla.

Bearing in mind, then, the true cause of death from chloroform, we will set our minds at rest on the question of danger, and "push" the anesthetic when demanded, if we "brace" the vasomotor system with a hypodermic injection of the antidote (atropine, gr. $\frac{1}{134}$, to be repeated if necessary) previous to beginning the administration of the chloroform.

In the operations of forceps delivery, turning, replacing of funis, changing of position, etc., it is necessary to be confident and fearless, and push the chloroform to extremes; else that which we desire, thorough relaxation, is not attained.

With regard to application of forceps, turning and changing of presentation, my friend Dr. W. C. Abbott, of Chicago, has suggested to me a procedure which facilitates these greatly, is easily done and which brings the field of operations within reach and away from the bed and discharges. It consists in elevating the foot of the bed and placing the woman in the knee-chest position. It is a procedure often adopted in replacing the funis, I am aware; but I have not seen it recommended for the above operations. So I conclude that Dr. Abbott is perhaps the originator of this method, and I would give him the credit which he deserves, if such be the case. In this procedure the intestines and uterus, with its contents, sink away from the outlet of the pelvis, leaving room for introduction of forceps or hand, and obviating the obscuring of the region by discharges. Experience has long ago proved its utility in replacing the funis.

Puerperal convalescence can be greatly assisted and accelerated by the administration of strychnine and ergotin, together with digitalin and quinine, three times a day for two or three weeks. These assist involution in uterine and heart muscle, and the energizing and contracting effect of the strychnine and ergotin upon the uterine muscle serve to close and seal more effectually any avenues by which infection might enter the circulation or lymphatics on the interior surface of the uterus. The digitalin improves vascular tone and stimulates the heart and assists the kidneys in the excretion of the effete matter resulting from the process of involution throughout the body. The quinine is a nerve tonic and serves to abort any chills and chilly seansations arising from sapremia, or even infection. It also has a supplementary action in stimulating contraction of uterine muscle-fiber.

These, then, are the points to which it was desired to call attention; and while we medical men are bewailing the fact that our profession has, in many quarters, been dragged down to the level of a trade, it behooves us to grasp every opportunity to arise above such level and regain the heights which once our beloved work occupied. We should seek the better way, be consistently scientific, and with docility, learn the lessons which the extremes to which the professional pendulum has swung, from time to time, have taught us. There is

chance for improvement in many directions, and one such chance is that of prophylaxis, symptomatic treatment, the grappling with conditions which arise before they amalgamate and develop into something serious. Furthermore, while we direct treatment to such conditions, it behoves us to be scrupulous in our selection of means, and employ such remedies as will do the desired work without producing, collaterally, any harm. This we can accomplish by the use of active principles, rather than "whole-drug" preparations. We wish to produce certain effects, and if we can do so "cito, tuto et jucunde," so much the better.

Confidence is a great desideratum in the practice of therapeutics, and this quality is begotten of a thorough knowledge of the means which we adopt and the results which they produce, rather than a hope that certain results will be attained. Further than this, the practice of therapeutics is impossible without power to diagnosticate correctly.

To sum up, then, the lesson to which we would call attention, we will adopt for our watchword: "To recognize the indications, to fufill them, and, in doing so, adopt those means which experience has proved to be the very best."

R. L. P.

GENERAL SURGERY.

IN CHARGE OF

H. T. BAHNSON, M. D, R. L. GIBBON, M. D.,

). HOWELL WAY, M. D.

"RECENT EXPERIENCES IN MILITARY SURGERY AFTER THE BATTLE OF SANTIAGO."—Under the above title Professor Nicholas Senn, now Lieutenant-Colonel of the United States Volunteer Service, and chief of operating staff with the Army in the field, contributes a most interesting article to the Medical Record, from which we extract the following:

"Wound Infection.—The military surgeon of today has the advantage over his colleague in civil practice, in knowing that the small-calibre bullet inflicts wounds which per se are more often aseptic than septic. The small, jacketed bullet seldom carries with it into the tissues clothing or other infected substances. Most of the wounds of the soft tissues, uncomplicated by visceral lesions which in themselves would furnish a source of infection, healed by primary intention in a remarkably short time. If infection followed, it usually did so in the superficial portion of the wound in connection with the skin, and what is more than suggestive, the wound of exit was more frequently affected than the wound of entrance. This can be readily explained from the larger size of the wound and more extensive laceration of the tissues. The deep tissues were seldom implicated, when, owing to a subsequent superficial suppuration of the wound, ideal healing did not occur. I

have reason to belive that some of the compound fractures which are now suppurating had such a source of infection; that is, the excension of a superficial infection to the seat of fracture.

The many failures in protecting the more serious wounds against infection are attributable to three principal causes:

- 1. Inadequate supply of first dressings.
- 2. Faulty application of first dressing.
- 3. Unnecessary change of dressing.

Proper dressing material was lacking at the front. Most of the dressings were too small, and not sufficiently secured to keep them in place during the transportation from the front to the field hospital. Not enough attention was paid to the immobilization of the injured part—an important element in securing rest for the wound, and in guarding against the displacement of dressings. It is a source of regret that plaster of paris dressings were not more frequently employed in the treatment of gunshot fractures of the extremities.

Patients brought from the first dressing station to the field hospital usually were subjected to a change of dressing, and when a few days later they reached the general hospital at Sibony, they had to undergo the same ordeal, and often not only once, but whenever they came into the hands of another surgeon. Patients thus treated, were dissatisfied, as the laymen are still laboring under the erroneous impression that the oftener a wound is dressed, the quicker it will heal.

In all cases in which the first examination does not reveal the existence of complications which require subsequent operative treatment, the diagnosis tag should convey this important instruction: "Dressing not to be touched unless symptoms demand it." I am satisfied more than ever of the necessity of including in the first-aid-dressing-package an antiseptic powder. For years I have used for this purpose a combination of boric and salicylic acid, 1 to 4, with the most satisfactory results. A teaspoonful of the powder dusted on the wound forms with the blood that escapes and the overlying cotton a firm crust which seals the wound hermetically. Should the primary dressing become saturated with blood, the same powder should be dusted over the wet dressings and an additional compress of cotton be added to the dressing. Much can be done in the after treatment in the way of readjusting the bandage and in immobilizing the injured part, but the first dressing must remain unless local or general symptoms set in which warrant its removal. I wish to repeat again and in the most forcible manner the language of the late Professor vonNussbaum: "The fate of the wounded rests in the hands of the one who applies the first dressing." If this be true in civil practice, its meaning cannot be misinterpreted in military surgery."

The Effects of Bullets On the Soft Tissues.—According to Dr. Senn's description, the effects of the Mauser bullets on the soft tissues differ slightly if at all, from those of the small-caliber lead bullets, and he

has "no further doubt that the new bullet will become encapsulated and remain harmless as readily or more so, than the old-fashioned leaden bullet.

THE X-RAY IN MILITARY PRACTICE.—The probe as a diagnostic instrument in locating bullets has in modern military service been almost entirely superseded by dissection and the employment of the X-ray. If from the nature of the injury and the symptoms presented, the bullet is located in a part of the body readily and safely accessible, and it is deemed expedient to remove it, this can often be done more expeditiously and with a greater degree of certainty by enlarging the track of the bullet, than by relying on the probe in finding and on the forceps in extracting the bullet. If the whereabouts of the bullet is not known, its exact location can by the X-ray be determined without pain or risk to the patient. The X-ray apparatus also showed the presence or absence of fractures, their relation to joints, the displacement of fragments in fractures of the long bones and enabled the surgeons to resort to timely measures to prevent vicious union. In the light of our recent experience the X-ray has become an indispensable diagnostic resource to the military surgeon in active practice, and the suggestion that ever army corps should be supplied with a portable apparatus and an expert to use it must be considered a timely and urgent one.

COURSE OF THE BULLET—Deflection of the bullet in the body is exceptional; as a rule the wound canal was in a perfectly straight line from the entrance to the exit. By following the track of the bullet it is not difficult to determine the organ or organs implicated in the injury.

GUN-SHOT WOUNDS OF THE HEAD.—A number of sufferers from gun-shot wounds of the head who survived long enough to be transported to the general hospital died within twelve days after the receipt of the injury. In all these cases intracranial infection was the immediate cause of death. Encephalitis and leptomeningitis constituted the fatal complications. The beginning of the intracranial inflammation was always announced by cerebral hernia, which in size was proportionate to the extent and intensity of the inflammatory process. The surgical treatment resorted to in most cases proved powerless in limiting the infection.

GUN-SHOT WOUNDS OF THE SPINE.—All who received gun-shot wounds of the spine, in which the cord was seriously damaged have died or will die in the near future. The immediate cause of death in such cases is either septic or leptomeningitis, or sepsis and exhaustion from the first-named cause takes place early, as the result of infection of the wound, and extension of the inflammation at the seat of the injury along the meninges and surface of the spinal cord. Wounds of the spine without injury to the cord frequently gave rise to temporary paralysis varying greatly in degree and duration.

GUN-SHOT WOUNDS OF THE CHEST.—It is well known that during our civil war, men had a better chance for life when the bullet passed through the

chest, than when the chest was opened and the bullet remained inside. The same remains true, now, although not to the same extent, since the smallcalibre bullet is less likely to carry with it into the chest clothing or other infectious material. The number of those with chest wounds who lived long enough to reach the hospital on the coast is astonishing, and still more surprising is the fact that unless the hemorrhage was severe the symptoms were mild, some of these patients being confined to bed only for a few days. All of these cases were treated on the expectant plan-that is, by dressing the external wound or wounds; in no instance was the pleural cavity opened for the purpose of arresting the hemorrhage. No further doubt remains in regard to the difference in the mortality of wounds inflicted with the large and the small-calibre bullets. The danger incident to gun-shot wounds of the chest made by small projectiles, consists in complicating injuries involving the heart and large blood vessels, and in the absence of such injuries the prognosis is favorable. It seems that empyema is a rare remote result of such wounds. Rib resection and free incision and drainage of the chest must be reserved for cases in which a positive diagnosis of empyema can be made. The safest and best treatment for hæmothorax requiring operative interference, is tapping and evacuation by syphonage.

GUN-SHOT WOUNDS OF THE ABDOMEN. -- Our recent experience has confirmed my convictions that not unfrequently cases of penetrating gun-shot wounds of the abdomen will recover without active surgical interference. A bullet may pass through the abdomen on a level with and above the umbilicus in an antero-posterior direction without producing visceral injuries demanding operative intervention. If the bullet traverse the small intestine area it is more than probable that from one to fourteen perforations will be found. Four laparotomies for perforating gun-shot wounds of the abdomen were perfored. All of the patients died. This unfavorable experience should not deter surgeons from performing the operation in the future in cases, in which from the course taken it is reasonable to assume that the bullet has made visceral injuries which would be sure to destroy life without surgical interference. Abdominal section is always justifiable in cases of internal hemorrhage sufficient in amount to threaten life. A number of gunshot wounds of the abdomen have occurred in connection with gun-shot injuries of the neck and chest in which the cavities of the chest and abdomen and their contents were implicated at the same time, and which are now on the way to recovery without laparotomy having been performed. A number of perforating wounds of the abdomen were on a fair way to recovery without operation, before they were sent home on transports. In most of these cases the bullet wounds were either in the umbilical region or in one of the iliac fossæ.

Gun-shot Wounds of the Extremities.—It is a source of gratification to know that few primary amputations were made for gun-shot injury of the extremities. Amputations were limited to cases, in which the condition of the soft tissue precluded any other course. A number of secondary amputations became necessary to save life in cases of infected compound fractures, complicated with injury and infection of the adjacent joint. A num-

ber of gun-shot fractures of the thigh and leg have become infected, and are now being treated by establishing free tubular drainage and resorting to frequent or continuous irrigation. Owing to the want of reliable plaster of paris, we had to resort to various kinds of splints, simple and double inclined plane, in effecting immobilization. The sheath of the leaf of the cocoa palm has served as an excellent material for this purpose. There is every prospect that most of these cases will ultimately recover with useful limbs.

H. T. B,

Therapeutic bints.

INTESTINAL ANTISEPTIC FOR CHILDREN.—Tompkins speaks highly of the following as an intestinal antiseptic in children:

B. Calomel gr. ij; Sulphocarbolate of Zinc gr. iij; Subnitrate of Bismuth dr. ij; Pepsin dr. ss

Sufficient for twelve powders. Three per diem in a child one year old.

--Monthly Cyclopæd:a.

GASTRALGIA. -

B. Codeinæ Phosphatis gr. ¼;
Bismuthi Subnitratis gr. v;
Sacchari Lactis, gr. iij.

M. Sig.—To be taken every two hours.—Ewald—Med. Rev. of Rev.

ANTI-RHEUMATIC MIXTURE (Dujardin-Beaumetz)-

B. Sodii Salicylatis dr. iij;
Aquæ Laurocerasi oz. j;
Spt. Vini Rect. oz. ss.
Syrupi Simp. oz. j.
Aquæ q. s. ad oz. vj.

M. Sig —A tablespoonful twice to five times a day.

A NEW METHOD TO RESTORE AN ASPHYXIATED CHILD.— Stringer (Vir. Med. Semi monthly, May 13, 1898) calls attention to the fact that the asphyxiation of an infant after a difficult labor, being due to lack of oxygen, may be overcome if the blood is kept oxygenated, until the sensitiveness of the child is sufficiently restored to permit normal breathing to begin. He discovered quite by accident that this oxygenation may go on through the surface of the placenta if the latter is exposed to the air. Having had a miscarriage case at the fifth month, in which the fœtus, the membranes, and the placenta all came away together, he wrapped up the specimen with the intention of examining it the following morning. Great was his surprise to find several hours later that there was still a pulsation of the heart. Life had evidently been prolonged by the aeration of the blood, which took place through the placen Stringer has since had occasion to test this method in the case of several full-term children born asphyxiated, and has found it to work admirably. As such cases usually follow long and difficult labors, the placenta is already separated in whole or in part, so that its removal does not present any difficulty. It is to be removed as soon as possible, its surface washed and exposed to the air, when the child will live an indefinite time, as it did in the uterus, without respiration. When respiration begins, which was not for twenty five minutes in some cases, pulsation in the cord will cease, and it may be tied and cut.

Motes and Items.

The University College of Medicine, Richmond, Va., has just added to its dental department Dr. W. E. Walker, of Pass Christian, Miss. Dr. Walker is president of the Southern Branch of the National Dental Association. The growth of this college in equipment and number of students have been remarkable. In the past five years over \$100,000 has been spent in Luildings, and the number of students in that time has grown from 118 to 284. The number of professors and instructors now embraced in the faculty is fifty-six.

NATURAL URINATION IN THE PUERPERAL WOMAN—A physician of large experience and close observation finds that the nenecessity for catheterizing a puerperal patient can be obviated and the danger of cystitis avoided, by simply giving a copious enema of warm water. It is said that even when the bladder is full the urine will be voided at the same time the water re-

turns from the bowel. It is surely worth a trial, particularly when a trained nurse cannot be had to use the catheter.—

Journal of Practice.

MEDICAL BARBARISMS.—We are well aware that the Erglish used by writers on medical subjects often does not conform to good usage. "Operate," as a transitive verb, we are unfortunately growing accustomed to, but it is fervently to be hoped that the following, cut from a medical college announcement, may never be accepted: "He will clinic (italics ours) in the amphitheatre once weekly," etc.

The following suggestion with regard to the not infrequent misuse of the word "case," is taken from the *Philadelphia Medical Journal:* "According to the dictionaries and common usage, 'a case' is the instance or history of a disease, the series of symptoms, circumstance and treatment constituting the special occurrence of a disease. Plainly and undoubtedly therefore the 'case' is very different from the 'patient.' And yet in every page of medical writings one sees an utter disregard of the distinction, and usage not only inelegant and incorrect, but often misleading and ludicrous. How in the world can a case 'be taken ill,' 'put to bed,' 'have a fever,' or 'die'? The patient may thus be spoken of, but it is absurd to speak of the case having a pulse-rate or temperature, of being comatose or delirious, dead, or posted. 'A case' thus reported is quite likely to suffer cremation."—*Boston Medical and Surgical Journal*.

MEDICAL SUPPLIES SENT WITH SHAFTER'S ARMY.—The surgeon general furnishes a list of the more important articles of medicine that were sent to Tampa and Santiago with the Army. Among them are: First aid packets, 39,000; alcohol, quart bottles, 3,502; bicarbonate of soda tablets 237,200; calomel and soda tablets, 40,000; camphor and opium pills, 188,800; castor oil, quart bottles, 3,422; chloroform, 1-5-pound bottles, 3,470; compound cathartic pills, 259,200; ether, 1-5-pound tins, 3,290; Fowler's solution, ounce bottles, 1,180; morphine tablets, 17,300; quinine pills, 4,678,000; strychnine tablets, 50,000; antiseptic tablets, 150,000; carbolic acid, two-pound bottles, 6,000.

MARINE HOSPITAL SERVICE PROMOTIONS.—Passed Assistant Surgeons to be Surgeons: Peckham, Cyrus T., August 10,

1898; Glennan, Arthur H.; Wasdin, Eugene; Brooks, Stephen D.; White, Joseph H.

Appointments to be Assistant Surgeons: White, Hark Johnston, July 29, 1898; Fricks, Lunsford Dickson; Heiser, Victor George, August 3, 1898; McAdam, William Ralph; Gwyn, Matthew Kemp; Hobdy, William Cott.

CONSOLIDATION OF MEDICAL COLLEGES.—The Southern Medical College and the Atlanta Medical College have consolidated and will hereafter be known as the Atlanta College of Physicians and Surgeons. Dr. A. W. Calhoun is President of the Faculty and Dr. W. S. Kendrick is Dean.

THE PITTMAN PRIZE.—We are instructed by the President of the State Medical Society to announce the renewal of the Pittman Prize with conditions. This prize of \$100 was established by the late Dr. N. J. Pittman for the best essay by any member of the State Society of sufficient scientific merit and giving evidence or original research. The Committee will be announced later by the President.

Professor William Pepper died at Pleasanton, Cal., July 25, 1898. The *Philadelphia Polyclinic* says of him: "It is not exaggeration to say that in his lifetime of scarce fifty-five years, he accomplished work that would have taxed the energies of four men living to three-score-and-ten. He found the University of Pennsylvania a college of respectable standing. He left it, after thirteen years as Provost, a real University of the first rank. Into every department of civic life his unresting activity, his genius for organization, his ability to move men even to enthusiasm, penetrated. The Free Library, the Commercial Museums, are but a portion of the far seeing plans for the improvement of Philadelphia that he was engaged upon. We know of none to replace him as a moving spirit of civic progress."

Algerian conjurers, it is known, are in the habit of applying hot metals to their bodies without suffering, and so can anybody if the metal is sufficiently hot. Apropos of this, an amusing story is told by Lord Playfair, of how, when the Prince of Wales was studying under him in Edinburgh, he had, after

taking the precaution to make him wash his hands with ammonia, to get rid of any grease that might be on them, said: "Now, sir, if you have faith in science, you will plunge your right hand into that cauldron of boiling lead, and ladle it out into the cold water standing by." "Are you serious," asked the pupil. "Perfectly," was the reply. "If you tell me to do it, I will," said the Prince. "I do tell you," rejoined Playfair, and the Prince immediately ladled out the burning liquid with perfect impunity.—Med. Times.

The Red Cross, it seems necessary to say in all frankness, must be taught the limits of its office and duties. We find it requires not a little bracing of the moral fiber to write a line of criticism as to the outcome of so much most praiseworthy sentiment; it also requires quite as much restraint to speak dispassionately of the proofs of sentimentalism gone mad, of rampant officiousness of conceited intermeddling as the members of this organization have filled the papers with during the recent weeks. The consummate impertinence of the multiplied complaints and criticisms of the medical departments of the army and navy, and of almost every surgeon connected with them, is sheer nonsense. These men are quite as unselfish, and we are sure have better business capacity and managing ability than their critics. We repeat our conviction that the management of the Red Cross is a deal too hysterical and vain, needs investigation of its receipts and disbursements, and, above all, needs the control of some common-sense male brain.— Phil. Med. Jour.

HYGIENIC CONDITIONS AT SANTIAGO.—During the past week there has been considerable cause for anxiety regarding the American troops in Cuba. The daily reports issued seem to indicate that the assaults of the Army's enemies in Cuba—tropical fevers—have been very wid spread. The formidable array of figures indicative of the extent of sickness has naturally been productive of a very depressing effect. Last week General Shafter reported that the total number of sick among his troops was over 4,000, and of these three-fourths were fever cases. More recently it is reported that one-sixth of the total num-

ber of the army of occupation at Santiago was on the sickroll. These facts are naturally disquieting, but their depressing effect is much lessened by the accompanying returns, which show that about as many convalescents return to duty as others become incapacitated. It is thus fortunate that the diseases, particularly the fevers, by which the troops are attacked are of a very mild type. The number of fatal cases seems to have been relatively small. When this is added to the fact that Dr. Leonard Wood, now Brigadier-General, has been appointed Military Governor of Santiago, the outlook is rather encouraging. Certain it is that under his able direction the regeneration of Santiago has begun. The wisdom of his selection is well shown by the will he has manifested to clean the city. Carts by the hundred are busily engaged in carrying the accumulated refuse to the outskirts of the city, where it is destroyed by fire. Not only are the streets being cleaned, but the condition of private dwellings is being carefully and thoroughly inquired into, and the prisons and hospitals inspected. It can thus be confidently asserted that the city will shortly be cleaner and healthier than it has been since the days of Cortes. The energy exhibited by General Wood and the sweeping measures instituted by his subordinates at his direction have naturally not been to the liking of the older inhabitants, accustomed as they have been to the dilatory methods of his predecessors, and it has been found advisable to establish a patrol to maintain order in the city.-Phil. Med. Jour.

DR. LEONARD WOOD—The war has been the means of bringing many men into great prominence, and not a few medical men have become noted, but none more so than Dr. Leonard Wood. Until the early part of May Dr. Wood was simply an assistant surgeon stationed at Washington. Just as soon as war was declared he was relieved from duty at Washington and was assigned to the task of assisting in organizing the company of "Rough Riders." It was not long before Dr. Wood was Colonel Wood; and his bravery and gallantry on the field of battle soon put him up to the rank of brigadier-general, and then another step made him military governor of Santiago. Surely this is

glory enough to attain in less than three months. - West. Med. Review.

THE GORGEOUS TOGGERY OF AN F. R. C.—It is announced that the new gown to be worn by fellows of the Royal College of Surgeons on ceremonial occasions will be of black stuff with crimson satin facings of a regulation shape and shade. Fellows who are graduates of any university may wear, instead of the fellow's gown, the gowns representing their degrees, provided they are more attractive in appearance than the former. The democratic simplicity of the proposed button of the American Medical Association is in marked contrast to these variegated garments, and yet there are some modest members of the A. M. A. who object to being labelled even by a button.—Med. Record.

THE HEROES AT THE REAR.—A Sun correspondent, who visited Siboney after the army had passed on and the fever-in-fected town had been burned, describes the condition in a few words: "The train was an hour and a half lurching down to siboney. What a forlorn, repulsive place it was, all ruins and soiled tents, the air impregnated with sickening hospital odors! The tents covered the wounded and sick who had not been taken off to the cool relief ships and the twenty-fourth (colored) infantry. Sullen and listless, the soldiers sat about their tents as if hating their fate and dreading the fever, and no sound came from the wounded. The hospital doctors were quiet and thoughtful, and their eyes sometimes scanned the sea for a sail, which was force They seemed to be unsociable, but they were weary almost unto death. These men were the heroes of the rear, and they deserved the medal of honor even more than the men who had led their companies up to the trenches on San Juan. story of their devotion to duty and sublime unselfishness can never be written, but if there is a recording agel it was not in This war has demonstrated to vain." an incredulous world that the American soldier is second to none in any of the qualities that make a warrior, and the members of the medical corps are second to none of their combatant comrades in any of the qualities that make a hero.—Med. Record.

ANTI-QUININE—Our esteemed friend, Ben. H. Brodnax, Brodnax, La., is again at the front in his crusade against qui-

nine. It is to be feared that the government has not heard of our friend else they would not have sent so much of this useless drug to our troops in Cuba. Brodnax is interesting and his diction is worthy of emulation, but if he allows such phases as this to creep into his productions we fear the worst for his reputation. Speaking of a friend who possessed knowledge of a certain fact, he says: "Nobody knows about it but him and me." This is an excellent text for all that he has written about the baneful effects of quinine, and his articles should be signed by the phrase instead of Ben. H. Brodnax, Brodnax, La.—Atlantic Med. Weekly.

RECOGNITION OF SERVICES.—The New York Tribune says that a bill has passed the House of Representatives to increase Dr. Mary Walker's pension from \$12 to \$20 per month. This was done in consideration of her advanced age and the valuable service she rendered during the last war, when she was not only a nurse, but a skilled surgeon. She went upon the battle-fields and into the hospitals where her efficient work called forth thanks from President Lincoln. Now that she is no longer able to practice her profession, it was deemed proper to insure her reasonable support for the remainder of her life.—Woman's Med. Jour.

Dr. Richard M. Swearingen, State Health officer of Texas, died August 7, 1898.

A SIGNIFICANT OPERATION.—The European press has reported an operation that is probably destined to have much more than ordinary significance. The daughter of the Sultan of Turkey was operated on successfully for what would seem to be hypertrophic stenosis of the pylorus. The operation was performed by Djemil Pasha, whom visitors to the surgical section of the recent International Medical Congress at Moscow will remember as an unassuming young man, who, though the representative of the Turkish Government, was only in evidence when he had something to say, which he did briefly and pointedly. After the operation he received the Osmanic order. Seven surgeons were present at the operation, and the dissemination of the

knowledge of the operation among the Turks is likely to have a most salutary effect with regard to the medical and surgical treatment of Turkish women by men.—Med. Age.

Reading Potices.

SUBACUTE AND CHRONIC DIARRHEA.—In the later stages of acute diarrhœa in in the chronic forms of this disorder it is quite often necessary to resort to the use of some remedy which will constringe the relaxed intestinal mucous membrane, restore its tone, and arrest the profuse exhausting discharges. To effect this object a selection must be made among the group of the newer intestinal astringents, and of those tannopine appears to be the most efficient, as it is the most recent. remedy passes unaltered through the stomach, and when it reaches the alkaline fluids of the intestinal canal, its instringent principle is gradally liberated and exerts its curative action upon the inflamed mucous membrane. Owing to its slow and gradual decomposition, its effect extends down to the lowermost portion of the intestinal canal, and hence it becomes a valuable remedy in many forms of intestinal disease attended with diarrhoa. In cases of gastro enteritis, cholera morbus and infantum, after all irritating material has been removed from the alimentary canal by laxatives, tannopine will prove a serviceable remedy for arresting the excessive drain of fluids from the system, and restoring the mucous membrane to a healthy condition.

The attention of our readers is called to the advertisement of Robinson-Pettet Company which appears on page 14, of this issue.

This house is one of long standing, and enjoys a reputation of highest character.

The preparations referred to, we recommend specially to the notice of practitioners.

The Columbus Phæton Company, Columbus, Ohio, are the only factory, to our knowledge, that give a guaranty covering a period of two years from date of purchase, with each vehicle that they sell. This guaranty is of great value to the purchaser for it means that the vehicles are so well built that the factory have confidence in them and will not be called upon to replace or repair under their guaranty. The Columbus Phæton Company are always, not only willing, but anxious, to make anything satisfactory that is not right.

A Case of Severe Electrical Burns.—The following account of a case, by Dr. J. F. Weathers, of New Albany, Indiana, has been sent to us: An electrician employed in the electric plant used to furnish power to the city streetcar line and to the arc and incandescent lights for the city accidentally brought his back in contact with the positive and negative keys of the switchboard of arc line furnishing ninety six street lamps and carrying four thousand volts of electricity. He became impaled, so to speak, on those keys until he was released by the tissues being burned away in two pits about three inches in diameter and down to the bony structures. The intervening space between these pits, which were ten inches apart, was roasted, and after the lapse of a few weeks was lifted out. It weighed about two pounds and a half. I was called to see him immediately after the accident, which was April 12, 1897. I applied linseed oil and limewater, equal parts, pouring the charred cavities full and covering them over with absorbent cotton. I kept this up I administered opiates to relieve pain; which was some days. quite severe. The sloughing was something awful; the cotton, bandages, clothing, and bed were saturated with pus. I turned my attention to some dry dressing and first used boric acid and · bismuth sub-nitrate, but this produced too much pain tried the antiseptic known as vitogen, sprinkling the powder lightly all over the surface, and over all a cloth saturated with linseed oil was laid. The effect was marked; quietude and sleep followed without the administration of an opiate. dressing was repeated generally twice a day for many days, and one remarkable feature is that I saw no more pus, and on undressing the wound there was visible no vitogen powder. treatment was never departed from until September 1st, when the patient was discharged. I used eighteen ounces, man withstood four thousand volts, as all the arc lamps were extinguished for the time.—New York Medical Journal.

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RECOLLECTIONS OF DOCTOR PEPPER.

By H. A. ROYSTER, A. B., M. D., Raleigh, N. C.

THE recent death of Dr. William Pepper, the distinguished Professor of Medicine in the University of Pennsylvania, brings to my mind certain incidents which occurred while I was a student at that institution. A recital of these and some words about the man himself may not be without interest. I consider it a privilege to contribute this meager sketch in memory of so great a man.

Just four years ago I was graduated from the University and at that commencement Dr. Pepper acted for the last time as Some months previous he had tendered his resignation, and I remember well the few remarks he made at that time just before one of his regular lectures. He said that it was the most sorrowful step of his life to withdraw from the presidency of the University, but that he thought a good motto was to "Let well enough alone." He considered his resignation better for himself and for the institution. Under his administration he had seen the University prosper and go forward (and he said this with becoming modesty) but he felt that he had done what he could and that the effort to do more might hamper its progress. He then referred to a scene which had impressed When Gen. Grant, at the head of a magnificent procession was marching up Broad street in Philadelphia after his tour around the world, Dr. Pepper saw him and

thus soliloquized: "If you die tomorrow yours will be one of the greatest names in history, without reproach or scandal; if you live a year, the lustre will be dimmed; if you are spared twenty years you may die in disgrace." This reflection taught him a lesson. Some men outlive their usefulness and it is well to rest on our laurels while they are yet fresh and green. The students heard him with regret for they were loath to feel that his magnetic influence was no longer to be actively felt in the management of the University.

On his retirement he made the University a gift of \$50,000 and never ceased to work for her every interest. Pennsylvania has not suffered since, for Pepper's mantle in the Provostship fell on worthy shoulders and Charles C. Harrison has been more than a simple successor in the office. Dr. Pepper still retained the chair of Theory and Practice of Medicine up to the time of his death. Of the honors he received, the enter prises he fostered and his achievements in behalf of the institution he loved so well, it will not be necessary to speak here. These have been told before and will be remembered as long as the University exists.

Dr. Peppers' greatness was stamped on his face. The wellshaped head, the piercing blue eyes, the aquiline nose and the firm but pliable mouth-all went to show an uncommon man. His smile was a kind and winning one, while his voice was pleasant and unusually attractive. The boys said he was "smooth"—and he was. As a lecturer, he was sometimes more entertaining than instructive. Never did he hesitate for a word, though often it was plain to see that he did not prepare for his lectures, simply talking from his large store of general knowledge and experience. A man with a ready tongue and the author of several works on medicine can afford to do this, many times did Dr. Pepper refer, in lecturing on a certain disease, to a case of the kind which he had just seen before coming in, that one wag of a student affirmed as his belief that Dr. Pepper had saved up those cases in his practice and visited them immediately before the lectures in order to make the references.

Once, in lecturing on heart disease he told of a Harvard student ("young, bright, handsome") who, on attempting to carry a bureau upstairs, fell dead on the steps. I saw one of

my classmates write in his notes: "Served him right: A Harvard student ought to have have had better sense than to take a bureau upstairs."

.Dr. Pepper frequently exaggerated picturesquely in order to make a point impressive. In a lecture on cholera he spoke of the time when he was an intern at the Pennsylvania Hospital and had ambulance duty to perform. Down in an Alaska street tenement house he found four men with cholera, three dead and one nearly so, and (in his own words) "As I entered the room, I give you me word, my boots were covered an inch deep with rice water discharges." I ran across this in my note book the other day.

In stature Dr. Pepper was rather small. He had a peculiar stoop of his shoulders, which many of his pupils and satellites have endeavored to imitate, some in jest and some in earnestjust as (it is said) many young Baptist ministers in the South have tried to acquire the "Broadus hump" Dr. Pepper's movements were quick and nervous, and his manners polished in the extreme. He had a way of leaning on the desk during a lecture, or making a gesture with his long forefinger, or even handling his large watch-fob that was singularly attractive. His manner of entering the lecture-room with his head bowed slightly and turned to one side was also pleasing. Like some other great men, Dr. Pepper was readily approachable. His sympathies were all with the students and his interest in them never abated. This was demonstrated by an incident that occurred during my last year and which also shows the readiness with which he could talk off hand on any subject. The members of the class of '94, who expected to practice in the State of Pennsylvania were considerably stirred up over the new and rigorous State Board examinations just instituted and they were disposed, along with the students of the smaller medical schools, to fight the law on the ex post facto ground. Dr. John Marshall, the Dean, saw this tendency among the students. He knew that graduates from the University could be trusted to pass the examinations worthily and wanted them to go up before the Board, in spite of the opposition from the smaller colleges. One afternoon Dr. Marshall spoke to me, as president of the class, about it and jotting down the points hurriedly on a scrap of paper, asked me to give it to Dr. Pepper just before his lecture and get him to talk to the class. When I handed the piece of paper to Dr. Pepper, he was in the little ante-room under the lower amphitheater, talking with one of his assistants (Dr. Stengel.) He smiled (of course), spoke pleasantly, glanced at the note, tore it up, dropped the pieces on the floor and went on talking about something else. He walked into the lecture room immediately afterward, smiled again and in a five minutes' talk so changed the boys' minds that they vigorously applauded sentiments which only a quarter of an hour before they had strongly denounced. They all passed the examinations. Such was the personal magnetism of Dr. Pepper.

In my opinion, it was as a clinician that Dr. Pepper was especially strong. His clinics were well attended; they were both charming and profitable. His diagnostic powers were rather of the so-called intuitive order—intuition being merely a rapid method of reasoning from close observation. Dr. Pepper's enormous experience, his quick eye and his knowledge of human nature always served him well. They accounted in a great measure for his seeming to jump at conclusions.

I shall never forget the night that Dr. Pepper examined me in Practice—or rather the morning, for it was at 2 a. m. I had just returned a few days before from Greensboro, where I went before the North Carolina Board of Examiners and had missed my place in the regular section. So I had to come up at the very end of the last division. The students had gone down late and Dr. Pepper was very busy, being called out once or twice during his examinations, which were oral and held at his private office. When I entered his room in my turn, he was at this early morning hour, busy writing personal letters at a desk and dictating to his stenographer at the same time, while he plied me with questions as soon as I was seated, attending to all three duties perfectly. I can certainly answer for the last named duty.

Dr. Pepper possessed in a high degree what is known as executive ability. He would have made an ideal president of a railroad, or of the United States for that matter. He was a leader, an influencer. It was said in Philadelphia that by a crook of his finger he could raise \$50,000 for anything. I heard a student once call him a "scientific beggar." Just rerecently, aided particularly by Dr. John K. Mitchell, he suc-

ceeded in forcing the Philadelphia councilmen, "after a disastrous epidemic of typhoid fever, to pass a bill which provides for the outlay of several million dollars for the erecting and maintaining of a proper system of filtration of water." He was also being urged to make a race for mayor of the city.

The University could ill afford to lose Dr. William Pepper. His chair will be filled by a competent man, but his place will never be taken in its entirety. His name will be as indissolubly connected with the University of Pennsylvania as that of Benjamin Franklin, its original founder.

INFLAMMATION OF THE SEMINAL VESICLES AND ITS TREATMENT.

By B. M. BAKER, M. D., Norfolk, Va.

EING honored by the President, by a request to read a paper before you I beg leave to ask your attention for a little while to some remarks upon a subject about which little has been said, and very little more written. The subject is "Inflammation of Seminal Vesicles and its Treatment."

My reasons for bringing this before you are several. First, because it is something rather out of the ordinary; second because there is very little literature on the subject. Then again, it is a condition, which I fear is often overlooked by medical men, and when thus overlooked, the unfortunate patient may go a long time with much suffering, both from the trouble as well as from harsh treatment pursued by his medical attendant, in the hopes of relieving the symptoms, the cause of which he has not yet made out.

I hesitated at first about making an effort in this direction, because of the fact that I myself have had comparatively few cases to report but I determined that I would report two of those few, hoping that it might at least put others to thinking in the same direction, and that their efforts might aid me in further treatment of these patients.

^{*}Read before the Tidewater Medical Association, Virginia Beach, Va., July 1898.

Now to the subject in point: in the beginning, I will simply speak briefly of the anatomy of these organs.

Projecting backward from the posterior border of the prostate gland, are found two oblong or pear-shaped sacs, running upward and outward on the posterior surface of the bladder. These sacs run upward, outward and backward, and have lying between them the "vasa deferentia". The functions of these organs, the "Vasa deferentia" are as follows: 1st. to aid in attracting the testicular secretions to the seminal vesicles; 2nd. to store it there temporarily and to provide means to preserve its vitality during that period; and, 3rd. to expel the seminal fluid as occasion may require.

In connection with the first function, namely that of attracting the testicular secretions to the seminal vesicle, the opinion is openly held that that duty is assigned in a great measure to the lower and larger portion of the vasa deferentia; it has further been held that the enlarged cavity of the vasa deferentia is not a store-house of seminal fluid, in common with the cavity of the seminal vesicle, and also that this portion of the vasa deferentia is not in the least associated with the seminal vesicle, in the accomplishment of the ejaculatory act; in fact that it has no direct connection with the ejaculation.

The function here ascribed to the lower portion of the vasa deferentia is, as it were, pumping the testicular secretion into the vesicle, and has never apparently been mentioned before, the accepted theory having been that this structure and the vesicle shared in common the function of storing and expelling the seminal fluid. This, however, we cannot go into further. It is enough to say that these are the store-houses for the seminal fluid, and that from them through the duct the fluid is carried as needed. This function is brought about by a contraction of the muscular fibres in the prostate and walls of each seminal vesicle.

In speaking of the pathology of this condition, I shall be able to say very little. The changes due to inflammation are the pathological features to be considered. As a result of this inflammation, the contents of the vesicle may lose, in a great measure, their liquid qualities, becoming thickened, and the walls of the ejaculatory ducts may grow inelastic and unyield-

ing. The walls of the main cavity of the vesicle may become thickened and rigid. Associated with this condition, the sur rounding connective tissue may, in the case of extreme inflammation, become extensively thickened, or, instead of thickening and rigidity of the vesicular walls, inflammatory changes may, by reason of ulceration, cause loss of substance, and consequently a thinning of these structures.

Inflammation of these organs may be described under three headings: Simple, gonorrheal and tubercular, and possibly syphilitic also, but the causes due to gonorrheal inflammation, are so much in excess of the others, that the trouble might be fairly spoken of as a complication of ghonorrhea.

Simple inflammation involving the vesicles is rare, gonorrheal very common, and tubercular sometimes. Simple inflammation is rarely seen. It's chief causes are masturbation, unnatural sexual relations the use of condom and occasionally total abstinence from sexual pleasures, during the active period of adult life.

Although these are the actual causes in most instances, still it is often found that the primary inflammation has been much intensified by surgical procedures, such as caustics to the deep urethra, over-distention by sound, electricity, and other similar treatment resorted to for the relief of symptoms.

I will speak mostly of those cases which came under my notice as a result of gonorrhœa.

First. Direct inflammation, occurring when the disease is in its acute state, extending directly from the urethra along the ejaculatory duct, and into the vesicle. Such inflammations are very acute and severe, the contents of the vesicle becoming purulent. The walls of the sack are also involved, as well as the surrounding tissue, and occasionally the inflammation may be so severe as to involve the peritoneum, setting up localized peritonitis, which in a few cases has become general. These acute cases are infrequent as compared with the indirect, and more chronic ones.

Indirect gonorrhoeal inflammations result from the extension to the vesicle of inflammations connected with urethral lesions, the source of which is gonorrhoea. In many cases the gonorrhoeal attack antedates the vesiculitis by many years. This inflammation is usually gonorrhoeal.

But I must hurry on to the clinical symptoms of this condition. I will give you first the symptoms both subjective and objective to be seen in a case of seminal vesiculitis the result of direct inflammation from a gonorrhœal urethritis, with a report of a case in point which came under my notice. I will then detail the symptoms to be found in a sub-acute or chronic case, also illustrating by a case which came under my care.

The direct symptoms in a case of acute seminal vesiculitis are, first, a distinct rise of temperature accompanied with pain and tenderness. This pain is usually referred to the right or left supra pubic region, corresponding to the involved vesicle, and also to the sacrum. From this region as a focus, it frequently radiates along the spermatic cord, and down to the testicles, although those parts may not be involved in the extension of the inflammation.

When pain so radiates, the corresponding testicle may be retracted during the paroxysm; then, again, it may radiate upwards towards the corresponding kidney, and may also be reflected towards the neck of the bladder and along the urethra. The pain is always of a reflex character in these cases, since it is the accompaniment of acute inflammation of the urethra, and possibly orchitis and prostitis, as well as inflammation. Urination is more frequent, the desire urgent and accompanied with severe pain, also considerable vesical tenesmus.

From what has been said it must not be inferred that the urinary act is necessarily stimulated in these cases, for the opposite may occur, it being at times very tardy and infrequent and unassociated with disagreeable sensations.

Sometimes, too, voiding of the urine is difficult of accomplishment, the stream being very fine or perhaps dribbling. Under these circumstances, the harder the patient strains in his attempt to micturate the greater the difficulty. This condition is brought about largely by reflex urethral spasms, due to vesiculitis, though inflammatory tumefaction may also play a part. Generally palpation on the affected side above the pubes, reveals great tenderness and abdominal muscular rigidity over the area involved. If the pressure is at all severe active painful sensations are awakened. The distention of the rectum, either by feces or gases increases this pain. The nat-

ural passage of gas or drawing it off with a tube gives relief, so, also, the natural evacuation of the bowels, if not attended with straining, but the pain is largely increased by any effort at straining. The patient seems to derive some comfort by maintaining the thighs more or less flexed, thereby diminishing tension on the abdominal walls. The temperature ranges . in this case from 100° to 104° F. In this disease, the temperature, pain and tenderness are very closely related in the amount of inflammatory distention existing in the vesicle While purulent material is collecting in the sac and is being discharged, all three of these symptoms are increased, reaching their maximum at the period of greatest distention. It is when the sac begins to discharge itself by way of the ejaculatory duct, as is usual passively and not associated with any apparent act of ejaculation, that the best state of affairs ensues; the three inflammatory symptoms decrease, the amount of decrease being regulated by the stream and extent of the drainage.

Thus it is that watching the urine is important. It is usually quite clear, while the inflammatory symptoms are severe, becoming cloudy and purulent with a decrease or decline of the symptoms as an escape of the pus from the vesicular cavity occurs. The patient's nervous organization is very much disturbed as a result of so much suffering. In the first stages of the disease erections, emissions and other evidences of sexual excitement exist but they usually promptly disappear, inflammatory symptoms taking their place as the trouble progresses. When emissions do occur they may be bloody or discolored by little streaks of blood. They are associated with pain, sometimes extremely acute. Such are the symptoms of this condition. However, there are many complications, such as epididymitis, cystitis, prostitis, lymphicts cellulitis and possibly peritonitis gonorrhœa is universally at the bottom of such a condition.

Under the head of subjective symptoms we might mention the physical signs gotten from rectal examination. Great sensitiveness of the parts and great pain occasioned by digital exploration, prevent you from obtaining the same help in these cases that you can by similar examination on the sub-acute or chronic cases. It reveals, however, in an uncomplicated case much swelling and tenderness situated above the prostate and on one or both sides corresponding to the position of the vesicle or vesicles involved. The tumefaction extends back beyond the reach of the finger. If the inflammation is largely confined to the vesicle the tumefaction feels like a sausage under the rectal structure. Under pressure it feels doughy and oftentimes indistinctly fluctuating. When such pressure is made much pain is experienced together with a sensation of urethral fullness. Accompanying this urethral sensation a free flow from the meatus is usual. In such an uncomplicated case the prostate is generally somewhat congested and swollen.

Treatment:—Absolute rest, fluid diet, anodyne to control pain, and attention to the bowels and bladder, application of heat constantly both externally by sitz baths and by means of enemas in the bowels, raising the foot of the bed, and supporting the testicles by means of a suspensory bandage or jockystrap. I will simply mention the fact that the application of cold instead of heat has been recommended and used in these cases.

Case 1.—Mr. C, 28 years old, who had been suffering for several months from stricture, and chronic urethritis, came to me on July 28th, 1897, with an acute attack of gonorrhæa; was treated for about a month by irrigation, and acute symptoms subsided. Because of the very great sensitiveness of the man, I advised him to take ether and have urethra examined.

The next day after passing the sounds he was suddenly taken with a chill, and rise of temperature, pain in back and lower part of the abdomen, very sensitive to pressure over pubis there being at this time little discharge from the urethra. The prostate and vesicles by this time were so sensitive that satisfactory examina. tion was impossible. Pain was so severe that he had to take morphine for several days by suppository. end of eight or ten days the urethra began to discharge very freely, pain and temperature gradually subsided, until at the end of the fourth week the patient was able to get up and move about, but not until he had lost eight or ten pounds.

In this case there was no epididymitis, nor symptoms of cystitis, but the pain over Poupart's ligament and in sacral region was intense. Action of bowels gave excruciating pain, and any attemp at palpating the prostate or vesicles through rectum almost threw patient into spasms From the moment the flow of pus from the urethra began, the temperature began to fall and pain to subside.

SUB-ACUTE AND CHRONIC CASES.

Inflammatory symptoms, although of the least im-

portance, will be considered first; in fact, with a great majority of these cases there are no inflammatory symptoms, at least none having any apparent connection with the vesicle. This is one of the probable reasons why this form of disease has hitherto been so generally overlooked. When inflammatory symptoms are present they represent a light grade of the corresponding symptoms associated with the acute condition, and as this subject has been fully considered, a complete repetition is not here necessary. There are, however, some points to be noticed. Pain in this condition shows a tendency to be reflex in character, and when such is the case should be considered under neurotic symptoms.

When localized however, it is generally complained of as being in the sacral region or above the pubis or in the bladder, less frequently in the rectum or in the pereneum behind the scrotum. It is intensified by sexual excitement or emotion, such features sometimes causing sharp paroxysms which will not wholly subside for several days. Other features which intensify these pains, although usually to a less degree, are constipation, diarrhoea, together with the constant rectal strain and tenesmus, sharp exercise and sometimes work which entails much bending forward of the body. Abdominal palpation, unless very heavy, is not liable to show much tenderness and very rarely any inflammatory thickening. Sometimes, however, in these thickness is a striking feature. It is then generally referred to the perineum, any pressure there causing discomfort and occasionally severe pain. As a result of these painful sensations it is common for the patient to become convinced that he has a vesical calculus or growth or a rectal tumor, hemorrhoids, prostatic disease, or the like, and in the hope of relief many of these sufferers have submitted to various operations on the urethra for alleged strictures, and on the rectum for hemorrhoids, ulcers, fissues, etc., at the hands of surgeons who lay more stress on doing something than on diagnostic research.

Fever is not a symptom of this condition and when present it does not continue, except occasionally where the process is tubercular or paroxysmal, in which instance it usually announces itself by a chill, the result of gonorrhœal infection the bacillus coli communis being thought responsible by some. The germs enter through some traumatism made by bladder instrumentation or local medication. The functional symptoms, as has been said, are very important, and among them sexual disturbances are of great frequency. Sexual desire in a majority of instances is diminished, in a less per cent. intensified, and in a few it is not affected. Intensified sexual desire is usually a symptom of the early stages of the disease the loss of desire representing a later stage. Then, again, the return of desire either normal or intensified, often occurs as a result of treatment and may be one of the early favorable prognostic signs.

The derangements in connection with seminal emissions are important. There are very few cases of these conditions where at some period of their course emissions have not been a cause of complaint. The grounds for complaint in reference to them are that they are too frequent; that they result from an insufficient exciting cause, or before a sufficient cause has had an opportunity; to act that when they do occur the muscular action is apparently incomplete, little or no ejaculation resulting; that they are followed by or associated with pain sometimes intense, though generally dull in character, and resembling one of the varieties of vesical pain which have already been considered; that they are followed by a feeling of depression and weight, and not the satisfaction and pleasure which is natural; and that their color, or what is more usual—the stain left behind them, is abnormal. When the complaint is made that they are too frequent, reference is usually made to involuntary nocturnal emissions.

Masturbation may be a symptom of seminal vesiculitis. At such times considerable pain is associated, so much so in fact that a suspensory bandage may be constantly worn in order to secure some relief.

Instead of a feeling of relaxation, that of contraction of the scrotum and of the testicles may occur. In some instances the contraction of the testicles may be so violent as to be very painful. These opposite sensations of relaxation and contraction may, and in fact often do, alternate in a given instance. In this connection, the complaint is frequent that the testicles are withering, although there is no real evidence of this fact, and

that the sensations experienced on the manipulation of them are less acute than normal, and are strange and unnatural.

Neurotic sensations within the urethra or vesicle are common, and frequently are features especially dwelt upon by individuals in the clinical recital of their complaints. These sensations are often, in the complainant's mind, associated more or less with a urinal act. They may be described as burning sensations of varying degrees of acuteness, extending all along the urethra, during the act of micturition, or the point of sensation may be localized in some definite spot along the urethra, generally just back of the frænum. In such instances the complaint is usually that the spot has a feeling of being raw, and that in micturition, as soon as the urine in its outward flow, reaches the point in question, a sharp pain is experienced. The neck of the bladder may be the seat of this sensation.

Persistent urethral discharge is a common symptom of this condition, a discharge of chronic nature, responding only to the treatment directed to the seminal vesicle. It is for this reason especially, that I bring to your notice some facts connected with this condition, the treatment of which alone aids us in curing many of the cases of chronic urethral discharge that come under our notice.

Gonnorrhæa is the most frequent cause of this trouble. Uncured gonorrhæa, or badly treated gonorrhæa, alcoholic excesses, or perhaps unnatural sexual practices. The index finger, and not the eye, is the means whereby you can acquaint yourself with the existence or nonexistence of this condition. The patient is directed to come to your office at your morning hour, after having emptied the lower bowel freely by a saline, followed by an enema, with the bladder two-thirds full of water, not hiving passed it since early morning.

He is directed to stand up before a chair or table, and to bend over with his body at right angles to his legs, you being seated behind him in a high chair. With the index finger of the right hand well greased, introduce it into the rectum; your left hand being on the front of the belly just above the pubic bones so as to push downward and backward the bladder, at which time little difficulty is encountered in reaching above the prostate, and making out distinctly these inflamed or swollen or-

gans, doughy and fluctuating. Their size varies according to the extent of inflammation present, from the size of a large slate pencil to that of the little finger of an ordinary man. Such manipulation is attended with more or less pain to the patient.

Having made out the existence of this pathological condition, the treatment is perfectly easy. Tonics (Cod liver oil, especially), and an assurance to the patient of the ultimate recovcovery from his pain, with a weekly local treatment, or *stripping* of these inflamed vesicles, will cure, or certainly partially cure the condition, and bring great relief to a long sufferer.

Case 2.—S. L. M., 34 years old, consulted me about four months ago for a pain in right testicle, extending upward along the cord to about two or three inches above Poupart's ligament. There was also more or less pain in the region of the sacrum. Gave history of having had several attacks of gonorrhœa and epydidimitis. Said that he had been treated by lots of doctors, and a slight discharge kept up with the pain, which, at times was worse than at others. He complained that he did not get the same pleasure out of sexual intercourse that he once did. Examination of the urethra revealed nothing especially abnormal. There was no trouble in passing a No. 30 F. sound into the bladder. As he had been treated by every known means to relieve this discharge, and especially the pain, including irrigation, deep injections, urethroscopic applications, and electricity the suggestion was made that perhaps the trouble was deeper than the urethra.

A rectal examination was made after the patient was properly prepared by an enema, etc. Here the trouble was found in the right seminal vesicle, and after milking out the contents which was largely pus, he at once expressed himself as feeling better, and that treatment carried on for eight or ten weeks, has relieved him almost entirely of pain, and the urethral discharge has entirely disappeared.

I might further add that the prognosis in the acute cases is good, as far as the acute condition is concerned, but local treatment of the subacute or chronic inflammation which is almost certain to follow will be necessary to relieve the symptoms and to lessen the probability of a recurrence of an acute attack.

MEDICAL ETHICS.*

By JOSEPH BIRD, M. D., Thomasville, N. C.

THICS, from the Greek—meaning manners, morals—is the name given to that science which determines the principles that govern the character of the voluntary actions of human beings with mature minds; moral science—the moral character of an action: to determine what meaning the word "ought" and the word "voluntary" has.

The American Medical Association has formulated a code of medical ethics, which is adopted by our own State Medical Society, and Davidson County Medical Society also.

Now, the burden or purpose of this paper is: Why study ethics? Why apply ethics to the practice of medicine?

Mankind is somewhat divided on what constitutes success in life. To quite a large number, it means a bank account, mainly the accumulation of money. They follow a business trade or profession for the money there is in it, and the measure of profit justifies the method pursued. To overreach, bid or undercut wages, shut out a laborer—any way to get the money—any way to get the business.

Make sure to tell the patient that "had I been fifteen minutes later I don't see how you could have lived." To this number, one of the cardinal principles of ethics "do as you would like to be done by," has no meaning—is simply pure nonsense.

While to those who hold that a bank account is not all there is of success in life; that there is something more lasting—something that moths and rust cannot corrupt; something that thieves cannot break into and steal—to these latter I say, the golden rule is a line of beautiful light, a sweet, precious and powerful influence, steadily drawing, steadily:moulding thought and action, giving to life a lustre, giving to deeds and work a value and virtue that remain operative long after the brain and hands have ceased their cunning. With these, ethics is a science and an art—a necessary study. A physician without ethical culture is not a finished man. With ethical culture he is an ornament to society, and an influence for good, that is not

^{*} Read before the Davidson County Medical Society, July, 1898.

surpassed by members of any other calling or profession in life. John Ruskin, in "The Crown of Wild Olives," lectures on work has the following apt words: "It is physically impossible for a well educated, intellectual or brave man to make money the chief object of his thoughts, just as it is for him to make his dinner the principle object of them. All healthy people like their dinner, but their dinner is not the main object of their lives. So all healthy minded people like making money-ought to like it, and enjoy the sensation of winning it, but the main object of their lives is not money, it is something better than money. A good soldier, for instance, mainly wishes to do his fighting well, he is glad of his pay, very properly so, and justly grumbles when you keep him ten years without it. Still his main notion of life is to win battles, not to be paid for winning them. of clergymen. They like pew rents and baptismal fees, of course, but yet if they are brave and well educated the pew rent is not the sole object of their lives, and the baptismal fee is not the sole purpose of the baptism. The clergyman's object is essentially to baptise and preach, not to be paid for preaching. So of doctors, they like fees no doubt, and ought to like them. Yet if they are brave and well educated, the entire object of their lives is not fees. They on the whole desire to cure the sick, and if they are good doctors, and the choice were fairly put to them, would rather cure their patient and lose their fee, than kill him and get it. And so with all other brave and rightly trained men. Their work is first, their fee second-very important always, but still second. You cannot serve two masters, you must serve one or the other. If your work is first with you and your fee second, work is your master, and the lord of work, who is God. But if your fee is first with you and your work second—fee is your master and the lord of fee who is the Devil, and not only the devil but the lowest of devils, the 'least erected fiend that fell.' Work first, you are God's servants. Fee first, you are the fiend's."

Now ethics does not ignore making money, but enjoins industry and economy, condemns laziness and prodigality. Business tact should be studied and cultivated. Strict business principles should govern the charging and collecting of fees. Ethics condemns the bidding for practice by cutting fees. There is something in such practice not elevating. It has more of the character of a trade than of a profession—something that belongs to the shop-keeper, dealer and commission man.

Prof. Agazziz, one of the greatest scientists of his day—was asked once, why he did not follow some business to make money? He replied, he did not have time.

The profession of medicine is not the business in which or by which you can make much money. The ideal physician aims at success in practice, not in the accumulation of wealth, wealth in money. I have heard it said of some men who were doctors, that they wanted no better business to make money by, than the practice of medicine. But before they were half through life, they were regarded as notorious rascals—their fee first, their master the devil.

Probably there is no business, certainly no profession, in which ethical culture, eithical influence, is so necessary and important for continuous and finally permanent success as the profession of medicine. Conscience, the moral faculty, needs as much culture as the intellectual faculties.

Edmund Burke, the great English orator, in one of his speeches made this remark: "While the law quickened and invigorated the mind more than all the studies, it did not to the same extent open and liberalize it." Now, medicine, I believe, certainly has the last more happy effect, while it may not to the same extent have the first, and hence I believe I am borne out in the statement that other things being equal, medicine needs a higher order of ethical culture for permanent success than does the law.

The world today is intensely practical, and conscience is at the same time more alive in the affairs of the world than ever before. It is conscience that is making heroes today in our army and navy. It is conscience—ethical culture—that helps the physician answer the calls of the poor. After years of toil; long rides by day and by night, in storm and sunshine, summer and winter; anxious, weary watching by bedsides, when loved and dear ones have been confided to his care and skill; with a double burden to bear, anxiety for himself, and for the patient and friends, at the close of a long life with scarce a holiday, then it is, that conscience—ethical culture—will help him to settle with the world, the satisfaction of duty well done.

The world has always loved a hero. But today, as intelligence has spread, it is beginning to love the principles that make the hero. And the artist seeks his Madonna—his ideal—in the different spheres and occupations in life.

Ian Maclaren in "Beside the Bonnie Brier Bush," has woven a chaplet in fame. "A doctor of the old school" will be read, loved and cried over wherever literatue consoles sorrow or assuages pain. J. Whitcombe Riley, the Burns of America, in "The Rabaiyat of Doc Sifers," is, in his way, scarcely less happy, less stirring, but more humorous. Each is an excellent delineation of the physician literally, wrapped in and filled with his profession. Luke Fildes with his brush is not a whit behind either one. I am told that when his painting called "The Doctor" hung in the art gallery in Philadelphia, that visitors, especially ladies, rarely could look at it long without weeping. What a tribute to the artist! What a lovely criticism of his work?

Rogers in his group of statuary, has the charity patient, the mother with the child in her arm and the old physician with his alembic. The pose of the figure and the mould of the features are forcibly touching.

What does the artist seek in his ideal? Is it not something that will not only impress those for whom he works, but will also inspire him for his work?

They who love their work and follow it along lines strictly ethical, they are the heroes. They inspire the artists' pen and brush.

Selected Papers.

ON THE RELATION OF THE GREAT NEUROSES TO PELVIC DISEASE.*

By F. X. DERCUM, M. D.,

Clinical Professor of Diseases of the Nervous System, Jefferson Medical College, Philadelphia: Neurologist to the Philadelphia College.

HE relation of nervous and mental affections to organic disease is a most interesting subject, and one which has been the cause of repeated discussion. Much confusion exists in the minds of surgeons with regard to the common nervous affections met with in daily practice. The reason is to be sought for in the fact that men who are busy in general practice, or in their chosen special field of surgery, find it difficult, if not impossible, to keep in touch with the progress made in other departments, such as neurology. Gynæcologists naturally view the troubles from which women suffer from the standpoint of the surgeon. It is fitting, therefore, that I approach the subject today from the standpoint of the neurologist and first direct your attention to the essential facts presented by the great neuroses. I employ the term, the great neuroses, for those two exceedingly common affections, neurasthenia and hysteria-affections, by the way, which are almost as frequent in the male sex as in the female, and may exist uncomplicated by any pelvic or other organic disease. I will consider them briefly in turn. First let us take up neurasthenia.

Too often the physician turns aside from the subject of neurasthenia as uninteresting, as being a tern applied to a condition rather than a disease, and as presenting symptoms that are vague and ill-defined, and from a study of which nothing definite can be gained. In reality, neurasthenia is an exceedingly interesting affection; one which, far from presenting a vague and ill-defined symptomatology, presents a symptom group, which is as fixed and as definite as any disease with

^{*}Read before the Philadelphia Obstetrical Society, June 2, 1898.

which we are acquainted. It is true that now and then the symptoms differ widely in detail, but they always present the same essential features. They are always expressive of fatigue, and I have, therefore, myself proposed for neurasthenia, the far more expressive name of the fatigue neurosis. The stamp of fatigue is of weakness, of irritability, and of ready exhaustion. A brief glance at the clinical picture will bear this statement out.

The symptoms resolve themselves into sensory, motor and general symptoms of psychic disturbances. Beginning with the sensory disturbances, we have, first, a general sense of fatigue or tire. This may be diffused throughout the entire body, but is generally accentuated in special regions, e.g., the head, the back or the limbs. It is characteristic of this sense of fatigue that in the simple and typical cases, it is brought on, if absent, or made worse, if present, by effort. It is expressive of diminished power for the sustained expenditure of energy and it is to be looked upon as one of the primary symptoms of neurasthenia. If the conditions causing this general sense of tire persist, the sensation ceases to be merely one of fatigue and becomes one of pain. In other words, when fatigue sensations become exaggerated, they become painful, and they are then described by the patient as aches of various kinds and are re ferred to special regions. Very commonly, for instance, the headache is described as a dull feeling or a dull aching, and is then relieved by the mere cessation of work or by rest. When it is more pronounced, it is referred to the occiput, to the vertex, or to the brow and may be associated with sensation or pressure or constriction of the occiput or temples, or with giddiness, or with ringing in the ears. No matter in what situation it is most pronounced, or how accompanied, it is always expressive of fatigue. Next in frequency, patients complain of backache. This at first may consist of a simple feeling of fatigue referred to the lumbar region and which is relieved by lying down, but which later may become so exaggerated as to make backache the most prominet feature of the case. The same is also true of fatigue sensations referred to the limbs. These may become so exaggerated as to make aching in an arm or in the legs the one symptom which leads the patient to seek medical advice.

When we jurn our attention to the phenomena presented by the visual disturbance of neurasthenia, we find that they are also expressive of fatigue. I will not stop to analyze these phenomena as this would be too great a departure from the legitimate field of our discussion. I will merely pause to say that the symptoms are those of ready exhaustion and are referable to fatigue of the accommodative apparatus, the retina and the cerebral centers. One of the most common statements which we meet with in neurasthenics is that they cannot read for more than a few minutes at a time; that the letters become blurred and that the effort gives rise to pain, generally headache, or other cephalic distress, such as vertigo. If time permitted, I would point out to you that similar truths obtain with regard to the other special senses.

When we turn to the motor symptoms we find that these also are expressive of fatigue. They consist more especially of muscular weakness which develops rapidly under exertion, of tremor and various modifications of tendon reactions. time at our disposal is entirely too short to consider the visceral and general somatic disturbances. These I have fully considered Suffice it to say, that the disturbances of circulation, of digestion, of secretion, and of the sexual functions, are all of them man ifestations of fatigue. For instance the primary fatigue symptom referable to the digestive tract is that of a digestion delayed and enfeebled, an atonic indigestion both gastric and in-The disturbances of circulation are manifested by feebleness of the pulse, coldness of the extremities, disturbances in the rhythm of the heart's action, and even by heart mur-The disturbances of secretion are manifested by change in character and quantity of the perspiration, of the urine and of the saliva which again are also purely and solely related to fatigue. When we turn our attention to the psychic disturbances, we find that they also are expressive of fatigue. marked and characteristic symptom, namely a dimunition of the capacity for sustained intellectual efforts is invariably pres-As the patient is incapable of long-continued physical labor, so is he or she incapable of long-continued mental labor. The attempt to do mental labor, sooner or later brings on symptoms of exhaustion, and if the task be persisted in, marked fatigue sensations make their appearance, especially headache. Associated with the lack of power for sustained effort, there is also the lack of concentrating the attention, and this the patient frequently mistakes for loss of memory. In addition to these symptoms, there is a lack of spontaniety of thought and a diminution in the strength of the will, a condition of general indecision, and mental and emotional irritability. Frequently, fear is also present, and may assume a general or a special form.

The symptoms that we have thus far detailed are those which I have termed in my writings the primary symptoms of neurasthenia, and they are always expressive of chronic fatigue. If we pause to analyze any one of these primary symptoms we find that there is present as the essential condition not only a marked and persistent diminution of nervous energy, but also an increased reaction, mental and physical, to external impres-In other words, to nervous weakness there is of necessity joined nervous irritability. Diminished resistance to fatigue implies diminished resistance to the impression from without; weakness and irritability are thus necessarily associated. is seen, for instance, in the motor symptoms where muscular weakness is associated with increased reflex excitability, and in many of the sensory symptoms, where, to the fatigue sensations, there are sooner or later added the symptoms of local hyperasthesia. Thus, hyperasthesia, often painful in character, is found over the spinous processes, over the coccyx, or over various other areas. Another illustration of the same general truth is found in the fatigue of the eye; here the patient is not only unable to use the eyes persistently, but there is also present, sooner or later, painful hyperasthesia and irritabilty of the eye to light, so that neurasthenics often begin to wear smoked glasses of their awn accord. It is this increased reaction to impressions from without that is of striking importance, as we will presently see, when we deal with organic affection occurring in neurasthenic subjects.

To discuss the symptomatology of neurasthenia fully, would encroach too much upon the time allotted to this paper, but let me say in passing, that there are present in addition to the symptoms I have mentioned as primary, other symptoms to which I have given the secondary, or adventitious symptoms.

To illustrate what I mean by secondary or adventitious symptom, let me point out that it is very common, for instance, to find associated with the headache of neurasthenia, other symptoms, such as a sensation of pressure or constriction, of fulness, of heaviness, or of throbbing of the head. Often sensations are present which the patient cannot properly describe. tremely probable that these curious sensations are, many of them, if not all, the result of various intercranial circulatory disturbances, and are not directly fatigue sensations. this reason that I have termed them secondary or adventitious. Time will not permit me to pursue this parallel into the other symptom-groups of neurasthenia more than to merely mention a few of them. Thus, among the motor symptoms, tremor, spasmodic jerking, fasicular contractions are not of themselves fatigue symptoms but are mere secondary outgrowths. Among the sensory symptoms, numbness, pins-and-needles sensations, velvety feelings, subjective sense of heat and cold are secondary symptoms. Among the visual disturbances secondary symptoms are generally indicated by such statements of the patient as, that objects look unnatural, that things look misty; or as though objects were looked at through a veil; or that everything looks dull or bright; that near objects look far away, or that they look excessively small or excessively large. These symptoms are evidently not fatigue symptoms but are clearly secondary or adventitious. Among the disorders of hearing, one of the most common adventitious symptoms that we meet with is tinnitus, which is variously described as buzzing, whistling, roaring, or ringing,

I mention these various adventitious symptoms to-night merely because they sometimes obscure to the superficial observer by their prominence the primary or essential symptoms. To briefly re-state the facts, let me say first that by neurasthenia is meant the fatigue neurosis; secondly, that the two cardinal conditions of the fatigue neurosis are persistent nervous weakness, together with increased nervous irritability, that is, increased reaction of the organism to impressions from without. When we apply this interpretation of neurasthenia to the study of the various special organs we find at once that a ready explanation is presented for many of the strange facts we meet with. How remarkable it is that eye defect often remains un-

discovered for years. A man who has become neurasthenic finds that exertion of the eyes brings on headache or makes headache worse, if present, because his resistance to fatigue has been diminished. In other words, an exertion so slight as to be utterly inadequate to evoke any symptoms whatever in a healthy man, may in a neurasthenic rapidly bring on a fatigue headache. In the same way a local defect or disease in other portions of the body may remain undiscovered as long as the general health remains good, and may only make itself felt when neurasthenia becomes established, i. e., when the nervous system presents the phenomenon of increased or abnormal 1e-This fact has especial application action to local impressions. to gynæcology. It is well known that a woman with a laceration of the cervix or perineum, a displacement, or possibly a prolapsus of the ovary may make no complaint as long as her general health remains good; not infrequently she fails to seek medical advice for the pelvic condition until neurasthenia has become established.

Without pausing to apply these considerations to the problems of pelvic surgery at this point of our discussion, let me briefly direct your attention to the conditions that I term collectively neurasthenia symptomatica or spurious neurasthenia. Grave visceral disease is, of course, associated with general bodily weakness, and this general bodily weakness is too frequently mistaken for true neurasthenia. Serious local or general disease weakens the entire organism, and with it the neryous system, and that various signs of nervous weakness should be present under such conditions is but natural. The symptoms present, however, never form that symptom-complex which characterizes the fatigue neurosis. Neurasthenia symptomatica is seen more especially in phthisis, in syphilis, in chlorosis, in the various anemias, in the toxemias due to infection or metalic poisoning, and in other grave disturbances of nutrition. It is important also to remember that it is also seen associated with the various insanities, and often constitutes the only feature presented by the prodromal periods of these affections. This last-mentioned fact is of the utmost importance, especially as patients in the prodromal periods of the psychoses are prone to be hypochondriacal, and to complain of various visceral ills.

I have met with several instances in which the patients willingly accepted the explanation that their illness was due to pelvic trouble, and submitted to operation, while the subsequent history of the case was that of a developing and finally mature insanity, running its inevitable course.

With this brief allusion to the subject of neurasthenia symptomatica, let us pass to the considerations of the second great neuroses.

[To be continued.]

A New Hemostatic Measure.—At the Moscow Congress Hollander, of Berlin, reported a case of total extirpation of the gall-bladder and the cystic duct, together with a resection of the liver, for carcinoma, in which hemorrhage was controlled by the use of air superheated to 300° C., applied to the surface to be cauterized through a tube of small caliber. the following advantages of this over other measures for the arrest of hemorrhage from the liver: An accurate prevention of hemorrhage without a foregoing loss of blood, and greater safety against secondary hemorrage; a more exact orientation of the anatomical relations determining whether one is operating in sound tissue or not, in contradistinction to the use of the Paquelin; less maltreating of the organ than occurs in bandaging of the body of the organ, ligating masses, and perforating the subsance; and finally, air cauterization leaves behind an antiseptic eschar which does not become detached, avoids the danger of catgut infection and the eventual destruction by heat of the substance of the organ adjacent to the cut surface.

A FOOL AND HIS CYCLE.—"Put a fool on a cycle and he will ride to destruction," make a very good reading or an old saw, says *The Lancet*, and describes a situation which we can regard with equanimity. But when the fool on his way to his proper destination thinks well to smash into other people it is time to put a limit to his folly.—Med. Record.

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Editorial.

DISINFECTION OF APARTMENTS.

The most generally accepted method of disinfecting rooms after they have been occupied by cases of infectious disease, has been for years by the liberation in the room of the fumes of burning sulphur. Of late years, however, there has been much adverse criticism of this method, the critics holding that the fumes of sulphur have very feeble disinfecting power, and almost none unless in the presence of moisture. This is a question about which some definite understanding should be reached at once, for the disinfection of rooms and their contents is the most important step in the restriction of infectious diseases, with the early and continued isolation of the patient.

Dr. Henry B. Baker, the very efficient secretary of the Michigan Board of Health, in a recent discussion of this subject at one of the sanitary conventions in that State, calls attention to the results obtained in preventing the spread of contagious diseases by the methods of isolation and disinfection recommended by the Board of Health. He shows that with these measures enforced the outbreaks of scarlet fever have been kept to an average of 2.25 cases for each outbreak, while where they were not enforced the outbreaks averaged 12.79 cases. Even better results have been obtained with diphtheria. He states that the method of disinfection is by the fumes of burning sulphur, of which three pounds are burned for each 1,000 cubic feet of space in the room. He says nothing about the use of moisture. "There is sometimes bleaching of fabrics, and other losses, incident to disinfection by the fumes of sulphur; but it is the only substance concerning which we have the most positive proof of its efficacy." There is no one, probably, who has more thoroughly studied the practical results of different methods of disinfection than Dr. Baker. He says in speaking of the most recent agent recommended for the purpose of disinfection, that in the effort to advertise formaldehyde as a disinfectant interested parties are making false statements about the the inefficiency of the fumes of burning sulphur.

"It is generally admitted that formaldehyde has not much power of penetrating into the interior of bundles, or between layers of goods. Some of the present apparatus for its production is entirely unreliable, and none of it has yet been subjected to sufficient ordinary use to prove its uniform reliability. One important point is the impossibility of knowing, after the disinfection is supposed to have been completed, whether or not formaldehyde has been actually produced in any considerable quantity. The wood alcohol used may all have disappeared but it may have simply evaporated, or it may have formed formaldehyde in the polymerized form in which it is useless as a dis-When sulphur is burned, it is absolutely certain that a disinfectant has been produced, because there is no oxide of sulphur that is not destructive of life; but there is not that certainty in the use of wood alcohol for the production of formaldehyde. Nevertheless, it is to be hoped that the time may soon come when formaldehyde shall be made as useful as sulphurus oxide, and less destructive to property."

It should be remembered that these remarks were made by Dr. Baker in December of last year, and that since that time

there have been improvements in the apparatus for the production of formaldehyde which may bring a fulfillment of the hope expressed in the last sentence of the quotation above. subject is discussed by Dr. E. C. Levy in a paper published in the Medical Register for August. He places formaldehyde gas easily at the head of all known agents in the disinfection of in-After calling attention to the unsatisfacty results fected rooms. from the methods of liberating the gas at first proposed and practiced, he states that the best means yet devised for obtaining the gas in definite quantities is the method of generating it from para formaldehyde, or paraform, as it is more commonly called. This a solid polymer of formaldehyde, with the formula C, H, O,. When this substance is subjected to the action of heat it is completely volatilized, the vapor given off being formaldehyde itself. The apparatus employed in this method is extremely simple and inexpensive and the paraform for use with it is supplied in pastils each containing sufficient for about 17 1/2 cubic feet.

The high germicidal action of formaldehyde is well established, and if this method described by Dr. Levy bears out the claims made for it, there will be less reason than ever for failure to thoroughly disinfect rooms and their contents after the occurrence of a case of contagious disease. At the same time the experience of the Michigan State Board of Health proves conclusively the fact that the fumes of burning sulphur do disinfect, if supplied in sufficient quantity, and not allowed to escape from the room through crevices. Dr. Baker states that the common roll sulphur, broken up, is the best form in which to use it, at the same time the cheapest, and that three pounds should be used for each thousand cubic feet of space.

Reviews and Book Potices.

The Nervous System and Its Diseases.—A Practical Treatise on Neurology for the Use of Physicians and Students. By Charles K. Mills, Professor of Mental Diseases and of Medical Jurisprudence in the University of Pennsylvania; Clinical Professor of Neurology in the Woman's Medical College of Pennsylvania, etc., etc. Diseases of the Brain and Cranial Nerves, with a General Introduc-

tion on the Study and Treatment of Nervous diseases. With four hundred and fifty-nine illustrations. Cloth, royal octavo; 1056 pages. J. B. Lippincott Co., Philadelphia. 1898.

This is the most extensive work on nervous diseases in the English language since the great work of Gowers. In addition to an introduction to the study and creatment of nervous diseases in general, it presents a full discussion of diseases of the brain and the cranial nerves. The author also promises that, should circumstances permit, this volume will be followed by another, which shall include the remaining diseases of the nervous system, insanity and the medical jurisprudence of both nervous and mental diseases.

Chapter I. contains a sketch of the nervous system, its tissues, development, anatomy, physiology, nomenclature and chemistry. In this it is noted that the nomenclature and terminology advocated by Professor Burt G. Wilder, of Cornell University, have been adopted. A section of this chapter has been devoted explanation of the nomenclature used. While we can but acknowledge that some such system as the one adopted is desirable, we believe that it will take more trouble to make the old time doctor fall into the new nomenclature, than to make him give up his grains and fluid drachms for grammes and cubic centimetres. Having become acquainted with it, however, it will prove more convenient as it is certainly more scientific, e. g. in this nomenclature "callosum" stands for "corpus callosum"; "habena" for "peduncle of the pineal body"; "diatela" for "membranous roof of the third ventricle"; "neuraxis" for "cerebro-spinal axis"; "præcornu" for "anterior horn of lateral ventricle", etc. One of Wilder's most important suggestions is the use of appropriate and, if possible, pre-existing mononyms (as the above) for all parts. This same system applied to the convolutions give us such terms as superfrontal, medifrontal and subfrontal for the old superior frontal, middle frontal and inferior frontal; subcollateral, for lateral occipitotemporal; subcalcarine for the median occipito-temporal, etc. Chapter II. treats of general pathology and etiology, symptomatology and methods of investigation, electricity and general therapeutics. The section on general therapeutics is very full and useful; it embraces a consideration of all the factors that go to improve the condition of the patient, including hygiene,

diet, climate, hydrotherapy, the various forms of baths, massage and movement treatment, special and surgical methods of treatment. A table is given of the doses of the more potent drugs used in neurological practice, and also of the untoward effects on the various organs of the body of those most commonly used. Special attention is drawn to the abuse drugs of the evil effects of which are often shown by patients on their admission to the hospitals for the insane, in dilated, sluggish pupils, diminished mental reflexes, feeble heart beat, flabby. pasty tongue, and tumid stomach. The various hypnotics and analgesics are gone over one by one and their especial indications considered. This section includes also a formulary. Chapter III. discusses diseases of the membranes, sinuses and veins of the brain, and encephalic malformation and aberrations. Chapter IV, encephalgic histology and physiology in their relations to focal diseases of the brain. The remaining chapters are given up to the study of diseases of the encephalic vessels. and the vascular disturbances of the brain, and to the diseases of the special senses.

The volume is well illustrated and is complete with biography and full index.

Review of Current Literature.

PEDIATRICS.

IN CHARGE OF

J. W. P. SMITHWICK, M. D., LAGRANGE, N. C.

HEREDITARY INFANTILE SYPHILIS.—In a paper read before the Northwestern Medical and Surgical Society of New York, Dr. J. Henry Fruitnight discusses the hereditary variety of infantile syphilis (vide The Medical News, Vol. LXXIII, No. 5). The following is a summary of the article and the discussion which follows: Strictly speaking, the term hereditary syphilis should apply only to those cases in which the infection occurs at the time of conception. There are three modes of infection: First, the woman being syphilitic infects the ovum; second, the infection of the ovum through the spermatozoa; and, third, after conception by intra-uterine transmission of the infection to the fetus. This last mode, as there is no direct communica-

tion between the lymphatics and blood vessels of the fetus and mother, must take place through the layer intervening between the placenta and the decidua, and the infection probably depends upon the relative strength of the leucocytes on the fetal and those on the maternal side. If the infection does not occur during the first two months of pregnancy, the fetus usually escapes the disease. The disease may be inherited from either of the parents, but if both are syphilitic the fetus does not stand as good chances of escaping. The source of infection does not, in the least, seem to affect the symptoms of the disease; and the first-born of syphilitic parents seem to suffer more severely than the later born children.

Symptoms are present in a very few infants at birth, and when they are present they are usually in a very severe form, the child living only a very few days.

The more intense the affection the earlier the symptoms will appear, and some authorities say that if no symptoms manifest themselves within one year from birth the child may be considered free from infection. However, three fourths of the subjects show symptoms within the first three months, and generally the first symptom is "snuffles" from the coryza. Soon after this the eruptions begin to appear, first on the palms of the hands and soles of the feet, and then on the face. Fissures appear at the angles of the mouth, and mucous patches on the lips and inner surfaces of the cheeks, and these are the most characteristic features of the disease in its hereditary form. The fissures are deep and bleed easily. The "Hutchinson's Teeth" cannot be considered as pathognomonic of hereditary syphilis.

The prognosis is usually worse in hereditary infantile syphilis than in acquired infantile syphilis, not only in regard to the life of the subject, but also as to the determination of the future constitution of the patient.

The treatment of the infant should begin before birth, the mother being at once put upon anti-syphilitic treatment as soon as she becomes pregnant. In addition to the ordinary treatment she should also take tincture of iron and chlorate of potassium as used and recommended by Professor Fordice Barker. Treatment should be pushed vigously up to the last moment before confinement. disease is suspected in an infant, treatment should begin at once and continue. Mercury by inunction is the remedy and method par excellence. The best way probably is to place a piece of mercurial ointment on the belly band which is gradually rubbed in by the movements of the child. The ointment must be diluted to suit the age of the patient. If this method disagrees the gray powder or the bichloride of mercury, the former in doses of one grain four times a day, and the latter in doses of one-sixtieth of a grain four times a day, well diluted may be tried. Calomel may also be tried in doses of one-tenth of a grain four times a day. This treatment should be continued for one year, though during the last half of the year the doses may be reduced one-third or

one-half. If the symptoms are those of tertiary stage iodide of potassium must be given in doses of twenty grains to two drams daily according to the age of the patient. Tonic treatment should receive attention at all times, and the remedies cod liver oil, iron, arsenic and nuxvomica should begiven. The local lesions should receive attention, and demand the same treatment as the same lesions do in the acquired form.

In the discussion that followed Dr. Murray said that all subjects with syphilis are liars, and consequently we must be able to recognize the signs of the disease. When a miscarriage occurs in a suspected case we should make a careful examination in order to ascertain the cause of the death of the fœtus. The epipheses of the long bones and the hair should be examined. He prefers inunctions in the treatment of the pregnant woman, because when mercury is given by the mouth it oftimes upsets the stomach and increases the nausea. The patient should bathe often so as to keep the skin in an active condition. the treatment of infants he employs inunctions of mercurial ointment and cod liver oil. In the very bad cases there is nothing to be done as the children always die. Dr. Green suggested that the tannate of mercury is the most agreeable form in which to administer the drug. Dr. Milbank held that fissures of the anus were the most frequent lesions of early syphilis, and are positively pathognomonic. Dr. Dessau contended that the notched teeth of syphilis are the second teeth, and if the first teeth are notched the cause is rickets. He says he does not think that an expert would be justified in making a diagnosis from the eruptions alone; there must be a multiplicity of symptoms in order that the disease may be recognized. The President mentioned the syrup of the iodide of iron in large doses in the treatment of hereditary infantile syphilis, and said that it was extremely important to keep the mother under mercurial treatment until after the child was born.

INVESTIGATION ON INFANTILE SCURVY IN NORTH AMERICA.—The committee on this work handed in their report to the Tenth Annual Meeting of the American Pediatric Society (Pediatrics, Nol. VI, No. 3). In all 379 cases were reported.

Race was stated in 372 cases, 367 being white, 4 black, and one Chinese.

Sex.—Out of 372 cases, 189 were male and 183 female.

Age when disease developed was stated in 359 cases. The youngest patient was three weeks and the oldest nine years.

Social Position.—Eighty-three per cent. occurred in private practice, and only 17 per cent. in dispensary practice. By these figures we are shown the greater tendency of the disease to occur among the rich or well-to-do. In 303 cases the hygienic surroundings are described as good.

Previous Health—Out of 285 cases suitable for study the previous health in 167 was stated as being good. In the remaining 118 cases the

children had suffered from the various diseases incident to childhood. Family history.—In 129 cases it is reported as good, in 97 it is negative, and in 74 various diseases are mentioned, none seeming, however, to have any bearing upon that point especially.

Diet—In 275 cases it was reported that the diet was thought to have been the cause of the disease. Twenty-four cases were reported as being due to other causes.

Food.—In 356 cases the kind of food was specified. Twelve used breast milk, 5 raw milk, 16 milk (nothing said about heating), 107 sterilized milk, 20 Pasteurized milk, 14 peptonized milk, 24 amylaceous food, 12 table food, 83 Mellin's food, 48 malted milk, 38 condensed milk, 13 Reed & Carnick's soluble food, 6 imperial granum, 2 Liebig's food, 4 lactated food, and 2 Nestle's food. Proprietary foods were used in 214 cases—60 per cent.

Symptoms.—Pain is a prominent symptom, being present in 314 cases affecting different parts of the body on motion or handling. In 91 cases pain was stated to be present when the patient was at rest. In 319 cases there was interference with motion. Rigidity was present in 96 cases. The position of the limbs was in 152 flexion, and in 23 exten-Weakness of the back was reported in 97 cases. Depression of the sternum was mentioned in 34 cases. Joints were reported swollen in 101 cases and shafts of the limbs in 197. The gums were diseased in 353 cases. Hemorrhages occurred from the mucous membranes in 164 Fractures were usually separations of the epipheses and are reported in only 9 cases. Fever was present in 182 of the patients. Bowels were regular in 74 cases, constipated in 126, diarrhœa in 65, bloody diarrhœa in 12. Of the 163 cases in which the urine was examined albumin was present in 33. Anæmia was present in 254 cases. Blood examinations were made in a few cases, and the percentage of hemoglobin was much reduced in all of them. The rcd blood corpuscles were counted in 7 cases and found reduced in 5 of them. Leucocytosis was present in 5 cases, poikilocytosis in 2. Emaciation was reported in 167 cases, absent in 50. Malnutrition was observed in 178 cases. Symptoms of rickets were present in 152 cases.

Treatment consisted of changing or supplying the proper food, either with or without drugs. The following conclusions are reached by the committee in regard to the etiology and treatment: (1). That the development of the disease in each case follows the prolonged employment of some diet unsuitable to the individual child, and that a change of diet which at first thought would seem to be unsuitable may be followed by prompt recovery. (2). That in spite of this fact regarding individual cases, the combined report of collected cases makes it probable that in these there were certain forms of diet which were particularly prone to be followed by the development of scurvy. First in point of numbers to be mentioned here are the various proprietary foods. (3). In fine, that in general the cases reported seem to indicate that the farther

the food is removed from the natural food of the child the more likely its use is to be followed by the development of scurvy.

Fatal Cases.—Of the 378 cases reported 29 died.

The Minority Report by August Caille, M. D., is as follows: (1). From a study of this report and from due consideration of other known facts, scurvy appears to be a chronic ptomaine poisoning due to absorption of toxins. (2). It follows the prolonged use of improper food, and abnormal intestinal fermentation is a predisposing factor. (3). Sterilizing, Pasteurizing, or cooking of milk is not per se, responsible for the scurvy condition. (4). A change of food and the administration of fruit juice and the treatment of the underlying cause is the rational therapeutic procedure in scurvy.

Therapeutic Bints.

COUGH MIXTURE WITHOUT OPIUM. -

B. Dil. hydrobromic acid, Spir. chlor., aa 3 j.

Syr. wild cherry and mucilage, q. s. to make 3 iss.

M. Sig. Teaspoonful as required—Practitioner.

ANÆSTHETIC IN LABOR.—Dr. Alexander Ballantyne read a paper on this subject before the Edinburgh Clinical Society, which he concluded as follows:

- "1. The simpler the mode of administration the better, but care and watchfulness are all-important.
 - 2. The best diluent is air, which ought freely to be admitted.
 - 3. Persistently attend to the respiration.
- 4. In a normal labor give chloroform only during pain until the head is on the perineum, when it may be given to full unconsciousness.
 - 5. After the birth of the head discontinue its use."

The president further maintained that:

- "r. We are always justified in giving chloroform in normal labor.
- 2. We should always do so in severe labor and in all cases of operative interference.
- 3. That in all diseases of the heart and in all diseased conditions of the blood vessels, the careful administration of the drug is beneficial, and often necessary to save life.
 - 4. That in general emphysema of the lungs the greatest care

and watchfulness should be exercised in its exhibition and that in conditions of great exhaustion and after great, rapid and recent loss of blood, as in placenta prævia, extreme caution is necessary, and it may be ether should be substituted."—Ex.

CORNS.-

B Potassi caust., 5. Aq. dest., 40. Glycerini, 20. Tinct. iodi, 5.

M. Sig. Apply morning and night with caution.—Prac. Med.

CATARRHAL SORE THROAT .-

Pulv. aluminis, gr. xv.
Acidi hydrochlor. dil., m x.
Mellis, 3 j.
Aq., q. s., ad 3 j.

M. Sig. 3j added to 3j viii of water, used as a gargle when necessary.—Ex.

Motes and Items.

Nostrums in Germany — There has been much difficulty in controlling the manufacture and sale of secret nostrums in Germany due to the fact that different courts would render different opinions as to what constituted a secret nostrum. A recent decision of a court of appeals declares any remedy a secret remedy, and therefore amenable to the laws governing preparations of this class, whose ingredients and their amounts cannot immediately be determined by any one so as to be able to judge of its value. This decision is being practically affirmed by the different State courts in all recent cases, so that the last loop-hole of the nostrum-manufacturer seems closed.

DR. WILLIAM OSLER.—A perfect deluge of deserved honors seems at present to have fallen to the lot of Dr. William Osler, of Baltimore, Md. No medical name is more frequently mentioned with favor at home or abroad than his, and no one has

done, or is doing more to merit such pleasant recognition. As a thinker, medical author, scientific observer, and medical teacher he has few peers and no superiors. It is only a few weeks since his name was mentioned in connection with membership in the Royal Society of Great Britain; then we learned that he had become dean of the medical department of Johns Hopkins University; now we hear he is offered the chair in the University of Pennsylvania, made vacant by the death of Dr. Pepper; and a dispatch from Edinburgh, Scotland, lately related that the University of that city had conferred upon him the degree of doctor of laws. In his case, at least, we have evidence in favor of the old saying that "it never rains but it pours."-Am. Med-Surg. Bulletin.

Reading Motices.

Peri-Urethral Fistula.—John H., Glen Brook, Conn.; German; age 40; first seen May 4, 1898. This fistula was the result of abscess, and of thirty years standing; had been under . treatment in four of the best hospitals in the United States, and had been three times operated on, with failure of benefit. amination revealed a large fistulous tract ramifying through into the membranous urethra; a source of great discomfort, as the patient was a cleanly man, and the urine at all times passed through the fistula into his clothing. I heartily recommended operation and blood treatment, to which he consented.

May 5th, after having regulated the bowels, patient being deprived of all food except bovinine in a little milk; assisted by Dr. Dooley, of New York, I made a careful dissection of the sinus, taking it out entire. The edges of the wound were cleansed antiseptically by the bovinine-peroxide reaction, and brought in apposition with silk sutures and dressed with boyinine; the dressing being changed every two hours for forty days, after which healing was going on so nicely that applications of bovinine every three hours were deemed sufficient. May 14th. the sutures were removed, the wound having entirely healed, and on the 16th patient was discharged cured.-Records Sound View Hospital.

The Marion Sims College of Medicine has greatly increased its facilities for laboratory instruction. The course now comprises the following: Anatomy, histology pathological anatomy, pathological chemistry, clinical microscopy, physiology, inorganic and organic chemistry.

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Original Communications.

NEW METHOD OF PRODUCING LOCAL ANESTHESIA.*

BY JAMES B. BULLITT, M. D., Louisville, Ky.

Stenographically Reported for this Journal.

HAVE a contrivance which I would like to exhibit, for the purpose of producing local anesthesia, and so far as I know attention has not been called to it. It is by the use of carbonic acid gas. I have been familiar for sometime with the use of this gas in the manufacture of ice in the system known as the carbon anhydride system, a very excellent system for produing ice, and it occurred to me the gas could be used very well for local anesthesia. After several trials the instrument before you was decided upon for experimental purposes, and I may say, works very well.

The storage drum contains twenty pounds of the gas which has been liquified by very high pressure; probably 1200 pounds pressure at room temperature would be necessary to convert this gaseous matter into liquid form, and when pressure is released expansion of the liquid returns it to the gaseous state.

It seems that local anesthetics are becoming more and more used, and this may turn out to be of some service. It would be a very cheap method of producing local anesthesia. The drum which I have here cost \$3.50, but could be bought for \$3.00 with proper arrangements. When exhausted the drum can be

^{*}Reported to the Louisville Surgical Society.

recharged. Attached to the outlet of the drum I have a small brass pipe at the end of which I have arranged a hypodermic needle, and by turning the small top valve the gas is liberated, and passing out through the small pipe through the hypodermic needle, you will see it produces a small cake of ice in the piece of cloth held in my hand in a very few sends. The exact length of time I am not prepared to say, as I have not made an accurate test. When turned on the hand it immedately produces a white spot like ethyl chloride. It is apparently a very harmless procedure.

Of course it would be impracticable to carry around a drum of this size, but I am sure that it would be a very simple matter to costruct a similar contrivance which would contain from one to two or three pounds which could be operated in the same way. The amount would have to be determined by experimentation. One thing in favor of the carbonic acid gas for local anesthesia is its comparative cheapness. Ethyl chloride is very effective but is rather expensive.

STABWOUND OF THE THORACIC DUCT.— RECOVERY.*

By W. H. LYNE, M. D., Richmond, Va.,

Demonstrator of Surgery and Demonstrator of Normal Histology, Medical College of Virginia; Late Resident Physician City Almshouse Hospital, Richmond.

URING my service in the City Almshouse Hospital of this city, many were the unusual, interesting, and instructive cases that came under observation, since this is the only emergency hospital here. Often cases of such rare occurrence befell the lot of the ambulance surgeon as to be regarded as surgical curiosities, chief among which is the following, viz.: a stabwound of the thoracic duct at the base of the neck, the result of a midnight street brawl.

^{*}Read before the Richmond Academy of Medicine and Surgery, August 9, 1898.

Dr. John A. Wyeth, in his most jucid essays on ligations, describes, on account of the proximity to the cervical blood vessels, the anatomy of the thoracic duct, which is but little larger than a goose-quill near its termination, as follows: "On a level with the insertion of the scaleaus it arches to the left, crosses in front of the subclavian, in front of the scalenus, behind the internal jugular and curves downward to empty into the subclavian at its junction with the jugular to form the left innominate vein." Posteriorly to the origin of the sterno-mastoid . muscle, lies the small anatomic field bisected by the following vital structures—the pneumogastric and phrenic nerves, internal jugular and subclavian veins, subclavian and left common carotid arteries, the thoracic duct and the near by brachial plexus, a field which the mighty dare but enter after the most careful deliberation and thorough study, yet the would be assassin's knife plunged amid this network of vital structures wounding only the thoracic duct.

On account of the rarity of injury to the thoracic duct, many works on surgery absolutely ignore the subject while others dismiss it with a paragraph

Very little is recognized in life concerning diseases of the thoracic duct, necroscopic findings, however, demonstrating their existence as secondary chiefly to a tubercular condition or a suppuration in some of the nearby viscera or lymphatic glands. Pus, blood, bile, and even calcereous matter and concretions have been found in the duct; a rare case of ossification of the duct has been noted as well as one of gangrene.

Sir Astley Cooper's experiments on animals revealed that gradual compression of the duct resulted in its dilation, whereas rupture resulted if suddenly compressed; during intestinal digestion, a compression of only a few minutes sufficing to effect a rupture, this being readily explained since the duct at this time is normally distended, due to the absorption of the digested fats, brought thither by the lymphatics, the sole conductors of this force-producing product. Where pressure is gradual and permanent, a chylous engorgement ensues, resulting in the establishment of a collateral lymphatic circulation. A varicosed thoracic duct, like a varicose vein is subject to rupture, discharging, according to locality, into or behind the peritoneum, into or behind the pleura, into the posterior medias-

tinum, or into the bladder; the effusions producing chylous ascites, chylothorax or chyluria, a case of the latter condition existing intermittently for fifty years in a woman.

Several interesting reports of abdominal and thoracic paracenteses have been made, in which the fluid microscopically proved to be chyle, the quantity being enormous. For instance, 289 pints in 22 tappings; in another, 15 gallons in 68 days; and a third in which 11.8 litres were found and withdrawn post mortem from the pleura.

The causes of rupture of the duct are (1) traumatism or (2) obstruction, which is produced, as in other ducts, by causes from within, as infiltrating or thickening of its walls, stenosis from cicatricial contraction, thrombi, etc., or causes from without, as pressure from neoplasms, etc. A cause not common to the obstruction of other ducts, but analagous, is the blocking of the venous outlet, produced not only by thrombus but by cardiac dilation with its subsequent venous engarge ment, which necessarily interferes with the discharge of chyle into the subclavian vein.

A case is reported where a child with a congenital heart lesion subsequently developed and elephantiastic swelling of the right leg with a papular eruption from which exuded a chylous fluid, such eruptions being associated with or alternating in cases of chylous ascites and chyluria. The frequency of concurrent phlebitis and lymphangitis readily explains the old term "milk leg," now known as a result of phlebitis. The association of thoracic duct disease, ascertained post mortem, with other tubercular conditions leads me to attribute the malnutrition and emaciation in this dread malady largely to this non-recognized cause.

Experimental wounds in animals have demonstrated the spontaneous cure of thoracic duct wounds, yet death from inanition is to be expected in the vast majority of cases.

Spontaneous cure is affected by either or both of two ways:(1) by contraction of the unstriped muscular tissue, which is circular but scant near its termination, along with the auxiliary elastic tissue, which is longitudinal; (2) by spontaneous coagulation of chyle, a property acquired after having passed through the mesenteric glands. Not only are the functions and histologic structure of lymphatics and blood—vessels nearly analogous but

also the results of wounds of each, longitudinal ones bleeding less been transverse, the severed edges being more readily apposed.

As in other ducts, longitudinal wounds in healing are les liable to be followed by stricture. Since the molecular basis of chyle is emulsified fat (this giving it its milky color, being colorless except during intestinal digestion), it becomes patent that a system deprived of this compound as well as its circulating medium, the excess of the albuminous liquor singuinis must necessarily suffer; the patient gradually wasting away if the sequel be a stricture or dying from starvation if the duct be completely severed.

The following case is of more than ordinary interest aside from its infrequency, since recovery, followed by no ill effects, resulted:

Case:—About 1 a. m. May 5, 1896, I was called to an emergency case at one of the police stations. On entering, information was given by some officers "that a negro man had been stabbed in the neck and that white blood, like milk, was coming from the wound." A thoracic duct injury was suspected by exclusion, but I silently agreed with them that "I had never seen white blood before."

The negro, aged 24, was of splendid physique, being a porter in a large hay and grain establishment.

On examination, an oblique stabwound about one inch long, depth unknown, was found above and behind the left clavicle and parallel with the outer border of the sterno-cleido mastoid near its attachment, thus, from the anatomy of the parts, necessitating a longitudinal wound of the thoracic duct. There had been considerable hemorrhage, which had stopped, and an abundant milky fluid was steadily escaping from the wound. For quite a time I was at a loss as to treatment, but, acting on the advice once given by an older physician, "to took wise, say little and do something if necessary," I decided to tampon, which was repeatedly done after having cleansed the wound with a weak, hot, carbolized solution, the packing of iodoform gauze and compress becoming soaked with chyle. On removing the patient to the hospital, the wound was again redressed under scarcely better aseptic surroundings, using a dressing of like character as before. When this dressing was applied, chyle was still escaping in good quantity, though the patient had been slowly moved nearly three miles. On removing the dressing during the ward visit about seven hours thereafter, the escaping chyle and oozing had completely stopped, and the regulation dressing was reapplied with the approval of the surgeon in-chief, Dr. J. G. Trevilian.

The patient was allowed a light diet. His recovery was prompt and uneventful, the only untoward symptom being a slight suppuration, the patient being discharged nine days after his admission, complaining only of a slight stiffness of his left arm. The patient was seen August 2, 1898, and was enjoying perfect health, weighing ten pounds more than he ever weighed before.

I regret to state that no specimen of chyle was secured for microscopic and analytic examination, which would have proved of special interest.*

Selected Papers.

THE CAUSE AND PREVENTION OF SUDDEN DEATH AFTER FIFTY.

THE HEART, KIDNEYS, LUNGS AND BRAIN, ALCOHOLISM AND SUICIDE BRIEFLY CONSIDERED.

By Sydney A. Dunham, M. D., Buffalo, N. Y.

IT IS the purpose of the writer to consider, under the above title, death which has occurred after a brief illness, from one to two days in adults, who did not consider themselves sick, who were busy in professional and commercial life, but in whom, nevertheless, a close medical examination would have disclosed in one or more of the vital organs of the body pathologic changes which have gradually developed from natural causes or predisposition, or have been acquired by disease, accidents or excesses.

Bichat gives this difference between death from old age and death from sudden seizure—namely, that "in the former death commences at the circumference and ends at the center, while in the latter death begins at the centers of vicality and gradually extends to utmost bounds."

Death may be expected, but sudden death is a serious thing and when it could have been prevented is allied to suicide.

^{*}Due credit must be allowed Bertrand Dawson, of London, for his exhaustive medical contribution in Vol. IV. of the Twentieth Century Practice, Wyeth, Packard, Parks, and the American Text Book of Surgery.

409 East Grace Street.

"How old are you?" is an everyday question. The physician answers most correctly in saying that "a man is as old as his arteries."

Balfour, in an interesting volume on the senile heart, says that "age must be measured by tissue changes and not by years, because those tissue changes which mark the progress of development from the cradle to the grave, intensify after middle life all the dangers of acute diseases and by accentuating any latent organic weakness or structural defects, inherent or acquired, often cause those to die from age who have scarcely begun to think themseves old."

An adult dies suddenly, the coroner is called and the first thought and word is "heart disease," according to the ancient and out of date phrase cor ultimum moriens. As to the order in which the vital organs have been found to be diseased, in cases of sudden death, the heart stands first, and the coroner's snap diagnosis is correct in a number of cases. Sudden death is more frequent after fifty than before, and increases with age in all cases except those of suicide. The four principle organs in the order of their frequency by which they cause sudden death and those which I shall consider in this paper are: the heart, kidneys, brain and lungs.

Cause of sadden death from diseased heart.—Among the immediate causes revealed at an auropsy may be found rupture of the heart walls—principally of the left ventricle, the contributing causes being fatty or fibroid degeneration, circumscribed myocarditis, necrosis following thrombosis or embolism of the coronary arteries; rupture of an aneurism of the arch of the aorta, perforating into either auricle or thoracic cavity, rupture of coronary arteries, due to atheroma, filling the pericardial cavity with blood; adherent pericardium, due to old attacks of pericarditis; a chronic valvular disease, due to endocardis and certain congenital malformations of the heart, which have gone on to middle life before producing sudden death.

Cause of sudden death from diseased kidneys.—It is only in recent years that our knowledge of kidney disease is sufficient to consider them among the organs that cause sudden death. After heart lesions the kidneys are the next structure that are likely to show disease at the postmortem.

Sir George Johnson is credited with the statement which is

today the expression of the experience and sentiment of the leading physicians that a cirrhotic kidney is a common occurrence in those who eat and drink to excess.

Apoplexy, convulsions, coma and edema of the larynx may be the immediate cause of death, but upon examination of the kidneys the chief cause or the principal lesion is revealed. chronic Bright's disease a cirrhotic or contracted kidney is the form most commonly recognized as producing sudden death. Broardel, of Paris, author of death and Sudden Death, believes sudden death in cases of gout always has kidney origin. gouty patients, when the function of the kidneys suddenly becomes altered, associated with degenerative changes in the · circulatory system we may expect impending danger. The first premonition the patient may have of this painless deceptive disease may come like a thief in the night or the blow of the highwayman in the form of sudden death. Business and professional men have seen their associates falling out of the ranks as if by ambush. The clergyman says it is dispensation of Providence; the physician, at heart, believes that it is a dispensation of ignorance or avarice, and knows that a carfel medical examination would have disclosed the disease, and by treatment could have averted the impending catastrophe. Chronic diffuse nephritis is the most insidious disease that can occur after middle life. It is fatal and gives short notice when not discovered early.

Apoplexy, pneumonia and Bright's disease are the common causes of death after fifty years of age. The statistics for Buffalo show how close they run in order of frequency. In 1894, apoplexy, 91; Bright's disease, 44; pneumonia, 46. 1895, apoplexy, 80; Bright's disease, 59; pheumonia, 59. In 1896, apoplexy, 98; Bright's disease, 76; pneumonia, 72. In 1897, apoplexy, 103; Bright's disease 102; pneumonia, 107.

In seeking life insurance many an applicant has been told of some unknown malady which they must dispose of before being accepted.

The physician today would paraphrase a verse of Blair's as

follows:

How shocking must thy summons be, O Death."
(To him who did not think himself sick.)
"Who counting on long years of pleasure here."
(Is quite untreated for that world to come.)

Cause of sudden death from brain disease. - The brain is held responsible for many things that go wrong with many other vital organs, but still it is the most helpless in defending itself after the others have suffered decay. The brain is so situated, and its blood so regulated, that it was prearranged to be the last organ to suffer decay or lose its functions. The brain itself seldom originates disease, but is continually being bombarded by foreign substances from the other organs of the body in the form of emboli, which shut off the nutrition and the uremias and toxemias paralyzing its functions. While brain tumors and abscesses are not infrequent, thrombosis and embolism of the cerebral blood vessels are the more common causes, with chronic endocarditis and arterio-sclerosis contributing. plexy and intracranial hemorrhage may show immediate cause, with aneurism and endarteritis, alcoholism and syphilis contribu-Here is an illustration of a medico-legal case of common occurrence in large cities: In a prize fight or social combat, or in making an arrest, one man receives a blow upon the head or face from which death ensues; the other is held upon a charge The autopsy shows a chronic pachymeningitis with the dura mater adherent, endarteritis and miliary aneurism of the cerebral arteries, together with the marks of syphilis or the history of chronic alcoholism.

While post mortem examiner or Eric County in 1890 a case of this kind came before the coroner for decision. The autopsy revealed, as described above, the diseased condition of the cerebral vessels with a diffuse he norrhage into the corpora striatum, optic thalami and ventricles. The cause of death was given as accidental and from natural causes. It was considered that under such physical conditions sudden death could have taken place at any time by any great mental emotion or physical effort. Any circumstance which increases the intracranial pressure under such conditions would be likely to cause death. Certainly a case of this kind should not go to trial on circumstantial evidence alone.

Cause of death from organs of respiration.—Pulmonary apoplexy, edema of the larynx, pneumonia, pneumothorax, hydrothorax, hematothorax, are some of the fatal lesions.

A physician of this city while under treatment for rheuma tism at the Warsaw sanitarium, three years ago died suddenly of edema of the larynx. He had been troubled with rheumatism for some time. A woman under my care died of pneumothorax, which was the result of septicemia.

Infarction of the lung with a following pneumonia commonly occurs in acute or chronic diseased conditions of the endocardium. Hydrothorax may be one of the fatal complications of kidney lesions with inflammation of the pleura and other serous surfaces. Pathologic conditions of the respiratory organs, causing sudden death, are largely dependent upon heart and renal disease, e. g., pneumonia and pulmonary congestion due to diseased heart and pulmonary edema, due to diseased kidneys.

Men atter fifty should ponder over Herbert Spencer's definition of life, as it will guide them in adopting preventive measures which are reliable. He speaks of life as "the continuous adjustment of internal relations with external relations. When men and women after fifty years of age have been informed (findeth wisdom) that some previous illness, e.g., typhoid fever or other infectious disease, pneumonia or rheumatism, has altered the function and structure of the heart or kidneys, they should be moderate in eating and drinking, avoid violent effort—both physical and mental—secure the advice of the family physician and then "length of days will be in their right hand, and in their left riches and honor."

While low degenerative changes in the vital tissues of the body may not be cured, they can easily be alleviated and frequently arrested.

Premonitory symptoms referable to the heart.—Precordial anxiety or uneasiness, bradycardia, tachycardia, arrhythmia and angina pectoris are among the earlier symptoms and when associated with organic changes such as fibrous and fatty degeneration of the myocardium, coronary sclerosis, dilatation and hypertrophy, are premonitions of danger, and the prognosis is based on the response which these conditions give to proper treatment. Angina pectoritis is more commonly found in males, because arterior sclerosis is more frequent and the first attack may prove fatal. Balfour states that "the essential lesion of the senile heart is a weakened myocardium and dilatation is the first stage of cardiac change."

The beginning of the fatal heart lesion was probably an endocarditis or endarteritis occurring a score of years or more previous and gradually following came sclerosis of the valves, rendering them incompetent, and then the insidious involvement of the coronary arteries, shutting off the nourishment to the heart muscle.

The more remote causes still will be found in articular rheumatism, pleurisy, pneumonia, pericarditis, malaria, alcoholism and syphilis. The general malaise, anorexia, anemia and toxemia of today, showing deficient elimination, without treatment, will blow the flame to irreparable damage in later years.

Many people are like an old ship, they are all right in fair weather, but go down when they encounter a storm. The only safety for the captain of such a vessel is to consult the weather bureau or the doctor.

Premonitory symptoms referable to the kidneys.—The signs of distress and danger will be noticed to be slow, continued headache, occasional dizziness, dimness of vision (neuro retinitis) sleeplessness, difficulty in breathing, muscular twitching and gastric disturbances. A closer examination reveals the urine diminished in quantity, of low specific gravity, usually a trace of albumin, casts may or may not be present, dilatation and hypertrophy of the heart.

While hypertrophy of the left ventricle of the heart and cirrhotic kidney are co incident, Gull and Sutton deny any direct casual connection between the two, but hold that the conditions are the result of one general affection of the arterial system, which they call arterio-capillary-fibrosis; that this condition primarily affects the arterioles and invades the other organs—heart, kidneys, lungs, brain, spinal cord and so forth—as a wide spread cachexia, which has its base in the vascular system.

As in the earlier stages of chronic Bright's disease, so in the senile degeneration of the heart and arteries, there may be no pathognomonic symptoms until the action of the heart is altered or the secretion of the urine changed in quantity and quality.

We cannot be dogmatic in asserting when such a termination will occur, but as physicians we should be able to give a uniform, positive prognosis in such terms that the patient will heed them. It will be more coducive to happiness and longevity if it were the custom to have a physical examination with a chemical and microscopical one of the urine made semi-annually in adults after they have reached the age of fifty. We have learned in the last few years that all contagious and infectious diseases are preventable, and it will be but a short time before the constitutional diseases of the aged will be considered preventable to a degree greater than at present. Contagious and infectious diseases of early life are preventable because they are understood and the manifestations are external and receive proper treatment, while the constitutional diseases of adults are not as well understood because their manifestations are internal, without alarming the patient until they are advanced.

Age, gout, alcoholism, syphilis and infectious diseases, according to all the authorities reviewed upon the subject, are the chief among the causes which produce the structural changes in the vital organs already named. These chronic, deceptive and largely preventable diseases, due to such poisons as uric acid and alcohol and syphilis which predispose the race chiefly to sudden death are not properly treated.

Alcoholism having been so long considered a vice, many physicians are slow to look upon it as a disease. In chronic cases where punishment has failed, treatment from one to six months has proved a success. And more than this it has proved a diseased condition of the alcoholic. When punishment is necessary as with beginners, it should be severe. Our present law for punishing drunkards is too lenient to have the desired effect. Drunkenness is too great an offence against decency, law and order, to go without a severe penalty.

They should be treated from one to three months as other nervous diseases are treated. Alcoholism produces more sudden deaths including accidents, than any other disease, and would when treated greatly reduce the death-rate from suicide.

Syphilis when treated with the thoroughness and exactness which the treacherous disease requires, would prevent aneurism, which so frequently is the cause of sudden death; also suicide, which is dependent upon cerebral gumma or endarteritis. As soon as the external manifestations have disappeared the patient quits the doctor, notwithstandg the admonitions to the contrary.

When the moral force is lacking, the State in other things lends a hand. Something should be done to compel young men to continue treatment for syphilis until dismissed by the physician, or have his name kept in a book provided for that purpose by the board of health; such names to constitute a list of ineligibles for matrimony. A contract between patient with syphilis and the physician for treatment until cured for from \$100 to \$300 would help toward keeping up treatment for two or three years, which is required.

Cause of sudden death from alcoholism.—Alcoholism is more frequently the cause of sudden death than is reported, because some do not want the stigma in the family recorded, and because they die of alcoholism some are refused burial in consecrated ground. It may cause death by producing congestion of all the principal organs of the body, with no appreciable lesion in any.

A middle-aged gentleman of this city, of fine physique, carrying over \$100,000 life insurance, died suddenly one morning while dressing. Autopsy showed considerable congestion of the brain, lungs, liver, kidneys, stomach and slight atheroma of the aorta. A chemical examination of the contents of the stomach revealed no poison and the death certificate was filed, giving as the cause of death no appreciable lesion sufficient to cause death. It was afterwards learned that he was a very hard drinker, but not becoming intoxicated easily it was not known to many of his friends. The evening preceding his death he used alcoholic beverages freely. Nervous inhibition is the only way to account for some deaths from alcoholism.

This paper would hardly be complete without some attention to suicide which, according to the better authorities, is on the increase

Lawrence Irwell, of this city, who has given time to looking up statistics, says that "suicide increases from childhood to the age of fifty-five, and then declines, and that it is due to racial deterioration." In the Christian civilization, where religion never looks upon it as an honorable thing to do, and where the act is punishable by law, suicide ought not to be on the increase. I would prefer to consider suicide the result of racial dissipation, rather than racial deterioration. Alcoholism is the

preponderating cause of suicide, according to French and American authorities.

If the incipient stages of melancholia aud other mental troubles were as well understood as the earlier stages of consumption and other infectious diseases, suicide would be more generally prevented. Why certain mental diseases lead to suicide has never been ascertained only as far as suicidal mania does not differ from other manias, such as kleptomania and dipsomania, the uncontrollable impulse is never removed by punishment and only prevented by watchful attendance and treatment.

Post mortem always essential after sudden death.——In 1890, an able-bodied man over fifty, died suddenly while in his chair at dinner. The coroner presented to me, for signature, a certificate of death which gave heart disease as the cause. Preferring to make an autopsy, the heart was examined with the other viscera and found normal. Before examining the brain I decided to open the trachea and just below the larynx could be seen fibers of meat pressing between the vocal cords, and upon opening the larynx a large piece of steak was found beneath the epiglotis, well wedged into the glotis. The cause of death was changed from heart disease to apnea or asphyxia.

A young man who had died apparently in good health while watching a funeral procession, and whose friends afterwards thought it was a bad omen, revealed at the autopsy the left thoracic cavity filled with blood, due to rupture of a thoracic aneurism. The young man had had syphilis one and a half years, but without treatment. There were no external sores showing the history of syphilis. An autopsy is not only necessary to ascertain the cause of sudden death, but to counteract the influence of superstition, charlatanism and Christian science. A middle-aged man, under the care of the Christian scientists, was taken suddenly worse and a physician was called who administered to the dying man in the absence of his wife. When the wife returned she accused the doctor of killing her husband therefore, the physician would give no certificate of the cause of death.

As believers and workers in preventive medicine we should recommend that adults after fifty seek medical advice regularly, at least annually, as a matter of business conducive to longevity; that the life insurance companies establish the precedent of requiring a medical examination annually of all policyholders over fifty years of age and whose policy exceeds \$2,000; that the treatment of alcoholism and syphilis should be made compulsory by law; that physicians try and agree in their examinations and be uniform in their prognosis of individuals in their declining years, and thereby to hasten the day when people at maturity will have the ever increasing confidence in the medical profession which their progressive science based upon higher medical education deserves.

ON THE RELATION OF THE GREAT NEUROSES TO PELVIC DISEASE.*

By F. X. DERCUM, M. D.,

Clinical Professor of Diseases of the Nervous System, Jefferson Medical College, Philadelphia; Neurologist to the Philadelphia Hospital.

[Concluded from last issue.]

HE second of the great neuroses is hysteria, or as I prefer to term it, the psycho-neuroses. I know of no affection concerning which there is still so great a lack of knowledge in this country and England, notwithstanding the fact that the French and later the Germans have unmistakably defined the symptomatology of the disease. We frequently hear it stated and almost as frequently see it printed, that hysteria is a disease without a syndrome: that it is a disease which presents an "indefinitude of shifting polymorphic disturbances." * This last phrase I borrow from a text-book on the practice of medicine, published in this country not later than 1897, and nothing could be more untrue. In reality, hysteria presents a syndrome that is as fixed and as definite as that of any other disease with which we are acquainted. Like neurasthenia its cardinal symptoms are always present and always characteristic, while it is equally true that other symptoms, secondary in importance, are from time to time added, though the number of secondary symptoms is far less than those met with in neurasthenia.

term hysteria the psycho-neurosis because the physical symptoms presented in it are denominated by mental phenomena, themselves the result of a genuine and profound affection of the cerebral centers. Prominent for instance, are emotional disturbances and modifications of the will, but to these are added physical signs so striking that they can never be misunderstood. The symptoms of hysteria, like those of neurasthenia, consist of sensory, motor, general somatic and psychic disor-Let us begin with the sensory symptoms. In neurasthenia the sensory symptoms consist for the most part of fatigue sensations combined with symptoms of sensory irritability. hysteria, on the other hand, fatigue sensations are absent, but instead there may be present true anesthesia, complete or partial; in other words, we are at once impressed with the fact of true sensory loss which never occurs in neurasthenia. this sensory loss or anesthesia is so characteristic as to enable us frequently to make a diagnosis of hysteria from it alone. need only allude to the condition of hemianesthesia, in which anesthesia is confined to one-half the trunk, head, and limbs of one side. Strange to say, this sensory loss involves most frequently the left side. Again, the loss of sensation may be less widely distributed, and then it is frequently characterized by peculiarities of location; for instance, it may be confined to a segment of a limb, that is, may extend from the elbow to the wrist, or from the knee to the ankle, and is then termed segmental anesthesia; again, it may cover the fingers, hand, wrist and arm up to a certain level like a glove, and is then spoken of as glove-like anesthesia; or it may cover the foot, ankle, and leg up to a certain level, and then is spoken of as stocking like anesthesia. At other times it assumes curious geometrical or irregular shapes. The fact which strikes the observer at once is the absence of correspondence of the various hysterical anes thesias to any nerve distribution or to any sensory representation in the spinal cord. This fact naturally refers us, in seeking for the seat of disturbance, to the cerebrum. As regards hemianesthesia this is further rendered probable by what we know of the pathology of organic hemianesthesia, and it becomes still more probable when we reflect that the facts at our disposal lead us to infer that the representation of the limbs in the cortex is by segments. To sum up, therefore, in hysteria it is the distribution of the sensory loss which is characteristic and which at once stamps it as hysterical. An important point however, should in this connection be borne in mind, and that is that the sensory losses in hysteria are most frequently far from being complete. Indeed, the most frequent condition that we find is that of diminution of response to tactile, to pain, and to thermal impressions, there being present under the conditions merely a general lessening of sensation, hypo-esthesia, or hypesthesia as it is termed technically. Partial sensory losses, therefore, having the peculiar distribution which I have stated, are as unmistakable in their significance as total sensory losses which are less frequently met with.

Far more important, however than anesthesia or hypesthesia is the hyperesthesia which is found in hysteria. This also may have a most varied distribution, but as a matter of clinical fact it seeks by preference certain localities. There are especially areas of hyperesthesia under the breasts, so-called "inframmatory tenderness" and areas of hyperesthesia above the groins, grossly misnamed "ovarian tenderness." These areas of hyperesthesia are sometimes found on both sides of the body; more frequently, however, they are limited to one side of the body, and, curiously enough, like the hemianesthesia, they are found most frequently upon the left side. Areas of hyperesthesia are also frequently found upon the scalp, and here the patch is so small that it can be covered with the finger-tip.

Not infrequently these areas of hyperesthesia become areas of hyperalgesia. The areas are not only tender, but they become painful, not only painful to touch, but spontaneously painful A familiar instance is found in the hyperesthetic area upon the scalp, which, when spontaneously painful, gives rise to severe headache, that form of headache known as clavus hystericus. What is true of the hyperesthetic area of the scalp is also true of the hyperesthetic areas about the breast, which, when painful, gives rise to mastodynia.

That both clavus and mastodynia are affections attended with much suffering no one will deny. When the area of hyperesthesia in the inguinal region becomes painful the suffering may be equally great. Owing to the anatomical relation which the inguinal region bears to the ovary this symptom has been greatly misunderstood. As already stated, it has been mis-

named ovarian tenderness, and has been directly attributed to the ovary, and yet there can be no doubt with regard to the nature of this pain, for we must remember that it is quite frequently found in men also in women in whom the ovaries have been removed, removed sometimes in a vain attempt to relieve this pairs. The pain is not ovarian; it should never have been called ovarian. Inquinal tenderness, groin pain, or, as I prefer, inguinodynia, are terms much simpler and in strict accordance with facts. The pain is, as a rule, confined to a limited area, and is found most frequently upon the left side, and is very often associated with a similar, though somewhat larger, area of tenderness beneath or over the left mammary gland, and it need hardly be said, also, with other definite, well-marked hysterical stigmata. As a rule, it is revealed by careful examination to be superficial and not deep. It is situated in the skin and the tissues of the abdominal wall, and not within the pelvis. I have frequently demonstrated this to be a fact by means of the following procedure:

The painful area having been carefully localized on the abdominal surtace, the tip of the forefinger of the right hand is allowed to rest lightly upon it; the left forefinger is then introduced into the vagina and directed upward and to the left until its tip is immediately beneath the tip of the forefinger of the right hand which is upon the abdominal wall. Just as soon as pressure is made between the two fingers the patient flinches. while the patient does not flinch when the pressure is made in other directions or when other portions of the abdominal wall are included. By this means I have succeeded not infrequently in isolating and demonstrating beyond a doubt the site and therefore the character, of the pain In some cases, just as in spinal tenderness, the pain radiates and becomes somewhat diffused, but it always radiates from a superficial center in the abdominal wall, and just as there are cases of spinal tenderness in which the tenderness is at one time superficial, and at others deep, so there are cases of inguinal tenderness in which the tenderness seems at times to be deep-seated; but even here, by the procedure I have described, the maximum point of pain can always be isolated and shown to exist in the abdominal tissues. To these considerations we will presently return.

I will not pause to speak of the contracture of the visual fields

in hysteria, nor of the reversal of the color fields, as they do not in this evening's discussion directly concern us. however, be borne in mind as affording valuable corroborative evidence of the existence of hysteria. The motor symptoms of hysteria are less frequently met with than the hysterical sensory disturbances which we have just considered. The motor symptoms consist in brief of paralysis, contracture, tre nor, and in incoordination. Motor symptoms so striking as these generally cause the case to be referred to the neurologist rather than to the gynæcologist, and I will therefore not pause to consider Similarly with the visceral symptoms, which consist of disturbances of digestion, of the circulation, of the heart, of respiration, of fever, of cough, of loss of voice, of yawning, of They also are less likely to come before phantom tumors, etc. gynæcologists for interpretation, and are so characteristic as to stamp the case at once as hysterical.

The psychic symptoms of hysteria are however, important for the gynæcologist. There is always some abnormality of the mental faculties in hysteria, more particularly a hyperesthesia and irritability of the affective faculties. The patient is, as a rule, exceedingly impressable, and reacts inordinately to impressions involving the affective faculties. She is abnormally sensitive to suggestions, especially with regard to her physical condition, and willingly accepts explanations attributing her symptoms to local disease. Not infrequently hysterical symptoms are brought to the surface, or, if present, are made prominent by the ill-considered statements or injudicious interest manifested by the patient's friends. It can be readily seen how doubly injurious under such circumstances incautious statements by a physician, or a pelvic examination, even when the latter yield a negative result, may be. I have on a previous occasion expressed my views concerning this matter as follows: "One can hardly judge the enormous mental impression a first examination must make upon a young girl, especially if that girl is already hysterical, already neuropathic by heredity and predisposition. Not only is the great evil of the moral shock to be taken into account, but the fact that there is lodged in the patient's mind a more or less vague but fixed belief that she has some mysterious local disease to which she only too willingly agrees to attribute her nervous manifestations. In consequence,

she sooner or later insists upon a repetition of the examination or a continuance of the local treatment once begun, and the morbid idea thus implanted becomes hopelessly rooted, never, perhaps, to become displaced." The enormous rôle which the mental condition in hysteria plays must constantly be borne in mind. It is for the reason of this large psychic element that I term hysteria the psycho-neurosis in contra-distinction to neuresthenia, which is properly termed the fatigue neurosis.

The foregoing considerations of neurasthenia and hysteria warrant the following almost self-evident conclusions. First, regarding neurasthenia:

- 1. That neurasthenia may exist independently of any local disease, pelvic or otherwise.
- 2. That there is no necessary relation between neurasthenia and pelvic disease when the two affections happen to co-exist in the same case.
- 3. That when pelvic disease occurs in a case of neurasthenia, the pelvic symptoms may be more readily recognized by the patient, and, therefore, become more prominent; because in neurasthenia there is an increased reaction to local impressions, nervous weakness, and nervous irritability going hand in hand.

Secondly, as regards hysteria the conclusions appear to be:

- 1. That hysteria can exist independently of any local disease, pelvic or otherwise.
- 2. That there is no relation between pelvic disease and hysteria, even when the two affections co-exist in the same case.
- 3. That while in hysteria there is increased reaction to external impressions, this reaction is purely psychic. To repeat the words used by me earlier in the evening, in hysteria the patient is exceedingly impressionable and reacts inordinately to impressions involving the affective faculties. This reaction to external impressions differs altogether from that seen in neurasthenia, for in the latter the reaction involves the nervous system as a whole. In hysteria the patient readily accepts the suggestion—often spontaneous auto-suggestion—of pelvic disease, especially as groin pain or inguinodynia is so common a symptom of hysteria.
- 4. That the pain areas of hysteria bear no relation to disease of the deeper structures.

How shall we apply these conclusions to questions of pelvic surgery?

First, all idea of curing neurasthenia or hysteria by operations upon the pelvic organs must be absolutely abandoned. Happily the day has almost gone by when such operations are attempted. Healthy organs are no longer removed in the vain and grotesque attempt to relieve the symptoms of the neuroses.

Second, when confronted with pelvic lesions occurring in women presenting nervous phenomena, the surgeon should bear in mind that there are, leaving out the insanities, three groups of nervous symptoms which such patients may present; first, those of neurasthenia; secondly, those of hysteria, and thirdly, those directly due to and symptoms of pelvic disease.

The symptoms of neurasthenia and of hysteria we have already considered. Those of the third group, those symptomatic of and directly due to pelvic disease are admittedly small in number. They consist of pains in the pelvis itself, pains referred to the lower portions of the back, to the sacrum, to the hips or thighs, and very rarely of sacral neuralgia and pain in the sciatic distribution.

It is important for the surgeon to keep these three groups of symptoms clearly separated in his mind and remember that when pelvic disease complicates a case of neurasthenia or hysteria, he cannot hope by operation to remove the symptoms characteristic of the neuroses, but only those symptoms properly belonging to the pelvic disease itself; and his operation should never be undertaken for any other purpose. the truth in other words, the surgeon should operate for the pelvic condition itself. For instance, if he operates on a tear of the perineum, he does so because the tear has resulted in mechanical difficulties—because it has given rise to a displacement of the uterus or perhaps to a rectocele, not because the tear occurs in a neurasthenic or hysterical woman. If he removes an ovary it is because the ovary is unmistakably diseased. If he removes an appendix, it is because the characteristic symptoms of appendicitis are present, and not because the patient suffers from neurasthenia or hysteria. If he sews fast a moveable kidney, he does so because the mobility of the organ is such as to threaten mechanical obstruction of the ureter with its consequent hydrops of the kidney, or because the patient

suffers from irregularly recurring attacks of gastro-intestinal cramp directly dependent upon the abnormal mobility of the organ, and not because the patient suffers from neurasthenia or hysteria.

Admitting the correctness of this position, the surgeon should approach cases of neurasthenia aud cases of hysteria somewhat differently. Contrary to what might, perhaps be inferred from the general tenor of my remarks, I believe that in neurasthenia operations for the cure of actual pelvic lesions are indicated and should, other things, equal, be performed. We remember that in neurasthenia there are added to nervous weakness, nervous irritability; that there is an increased reaction to local impressions, and I maintain that it is just as proper and just as clearly indicated to correct local pelvic disease in neurasthenic patients as it is to give such patients glasses to relieve their ocular symptoms. It is important, however, in considering operations upon neurasthenics to bear in mind that these points are excessively sensitive to nervous shock. All gynæcologists are aware of the persistent nervous symptoms—the persistent surgical neurasthenia that ensues now and then after pelvic operations in otherwise healthy people. If such operations be undertaken upon persons already neurasthenic, great harm may be Therefore, if in a case requiring pelvic operation neurasthenia be present in any degree (provided, of couse, that the operation be not urgently indicated for surgical reasons) I believe that the patient always does better if the operation be preceded by a period of rest, forced feeding, bathing, massage, etc.; in other words, by some form of rest treatment, or, as I prefer to term it, physiological treatment, adapted to the case. It is my own plan to disregard the pelvic lesions (unless these be urgent) of neurasthenic patients until, by a proper course of treatment, the nervous features have been eliminated, then to call in a surgeon and if, in the opinion of the latter an operation is indicated, to have the operation performed.

If the patient instead of being neurasthenic be hysterical, a similar plan should be adopted. We should first treat the hysteria, and then, if necessary, submit the patient to operation. If the hysteria be very profound, however, operation, I am convinced, should never be undertaken unless the surgical indications are urgent, and of such a character as are necessary to

save life. I have in more than one instance seen an otherwise curable case of hysteria converted into a hopeless and incurable one by an injudicious operation. It is in my experience a re current observation that women suffering from pronounced hysteria, who are submitted to operation, return to the surgeon complaining of additional pelvic troubles and are again submitted to operation, and this cycle may be repeated a number of times. I recall one case in which a woman at first had both ovaries removed; subsequently, because her nymphæ were rather large and projected beyond the labia mojora, she ascribed all of her troubles to them and at her solicition they were amputated. Subsequently to this she ascribed all her troubles to her rectum, and finally the sphincter was cut. Sometime after this she came under my care and almost immediately begged me to examine the rectum, asserting that she was sure that a further operation was required. It is needless to say that by this time her hysteria had degenerated into a true psychosis and she proved to be hopelessly incurable. I mention the case because it is not impossible that some of the members of the Obstetrical Society can duplicate this experience. We should remember that in hysteria the psychic make-up of the individual is always profoundly involved; that there is (as I have already expressed it) an inordinate reaction to impressions involving the affective faculties—an inordinate susceptibility to suggestion. In reply to the statement that may be made that operations upon hysterical women sometimes cure the hysteria by suggestion, I answer that it has not been my fortune to witness such a result.

I have already trespassed on the time of the Society or I should be glad to make some remarks on the relations between pelvic disease and the insanities, but the line of thought that I have pursued in considering the great neuroses indicate, in a large measure, my general point of view.—Am. Gyn. and Obstet. Jous.

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Editorial.

THE ARMY HOSPITALS.

Certainly there has been a hornet s nest stirred up in regard to the management of the hospitals at the home camps as well as on the field of action. Great Yellow Doctors who acquire notoriety and money through the commendation of patent foods and the invention of new consumption cures, are employed by great yellow Journals to inspect the camps, and of course they find such a condition of things as will, when published, make the Journals more sensationally yellow. Men are allowed to lie in their tents and die like dogs, they report, without receiving any medical attention, even when they drag themselves out before the passing surgeons and implore help. Everything is wrong.

In other hospitals the men are dying on account of a criminal lack of proper food; they have to drink water, which in New York they would refuse to use for the bath even; the sick men are simply placed upon litters not more than six inches from the ground; few, if any, of the hospital tents have plank floors; nourishing food is lacking as well as proper medical attention; the food is regular army rations, poorly cooked, etc., etc. the other hand, the report of General Boynton shows things are not nearly so bad as they have been pictured. Of the two permanent hospitals at Chickamauga one is a large summer hotel converted into a hospital. In this are received the worst typhoid cases from the camps. The patients have abundant room, woven wire and hair mattresses; the ventilation is perfect, the plumbing new, and bathing facilities ample. The Sternberg hospital is considered by veterans of the civil war to be one of the most complete field hospitals ever seen by them; all the tents are separate and closely floored; they have iron bedsteads with woven wire mattresses and hair matresses; there are special diet cooks, storage rooms for delicacies from 16 to 24 barrels of distilled water and from three to five tons of ice are furnished daily. In fact, the report shows that these hospitals are conducted in the most careful manner and that everything possible is done for the welfare of the sick soldiers. It is shown that the report of starvation came from the report of the typhoid convalescents who were always clammoring for food, but of course did not receive such as they wanted. In the face of all these adverse reports one cannot know what to believe, and we will have to wait for an official investigation. There is one thing very apparent, that those who volunteered to serve their country had no idea what real war meant, but likened it to a State encampment. The patriousm which prompted these men to fight that the noble sons of Cuba might be free, should prompt them to bear in silence the suffering that must accompany an army in the field, and not on this account denounce their country as ungrateful,

GOOD ROADS.

It is so all important to the comfort of the physician who is called upon to drive through the country at all seasons and hours, that the roads should be good, that we think no apology is called for in giving such prominence to the following arguments in favor of good roads throughout the State, from Professor J. A. Holmes, (Charlotte Observer) who has made a careful study of the subject for several years, and who bases his arguments on the experience in Mecklenburg and other counties. He argues:

- z. Dirt roads are the most expensive roads that can be used.
- 2. Macadam roads properly constructed are the most satisfactory and cheapest roads yet discovered.
- 3. The old system of working roads by statutory or compulsory labor is a failure.
- 4. Working roads by taxation is the only just and satisfactory system. In certain cases under certain conditions a few people might be allowed to work out their taxes.
- 5. Trained labor and competent engineering supervision are as important in building public roads as they are in the building of railroads, or any other special business.
- 6. Convicts make cheap and satisfactory road builders, and every short term convict in North Carolina ought to be at work on the public roads of the State.
- 7. All important public roads in middle North Carolina ought to be so located and graded that at no place would the grades on these roads exceed four feet in one hundred.
- 8. Hills and mud-holes, both of which are avoidable, are the two most expensive features about the dirt roads.
- g. All road work should be done with a view to its permanency. A poorly built macadam road is largely a waste of time and money.
- no. Roads near the county seats are used by more people than those in any other part of the county; consequently the system which accomplishes most for the greatest number of people is that which begins at the county seat, and as rapidly as possible improves the main public roads from this point out to the outer portions of the county.
- 11. Good roads are not simply a luxury for rich countries to enjoy; they are a necessity for poorer countries in order that they may become prosperous.
- 12. Every country which has good roads has recognized the fact both in its practice and in its laws, that wide tires on all wagons are better for the roads and better for the teams. This is a country in which we all boast of our freedom, but a man

should be no more free to use a narrow tire on a wagon with a heavy load than he should be allowed to take a pick and dig up the road. Both destroy the road and both should be prohibited by law.

- 13. Good roads are expensive, but in the long run they are far cheaper than bad roads.
- 14 The bad roads in North Carolina to-day cost her people in labor and money but fittle less than \$10,000,000 a year; and yet over two-thirds of the counties in the State still refuse to levy a small pittance of a tax for good roads which would help throw off this terrible burden.

This enormous bad road tax is to-day the biggest factor in the industrial depression from which our people are suffering. It is as real a tax as any man ever paid. It is the largest tax we pay. It is a tax on our horses, a tax on our vehicles, a tax on our time, on our labor, on our business, a tax on our intelligence, a tax on our women and children, a tax on every body, a tax on the living and on the dead; and yet what makes it all the worse, it is a tax which in all its blighting effect has not one redeeming feature. It oppresses everybody, and the farmer more than anybody else; it retards all business, and agriculture more than any other, but it does not benefit one single living person.

The doctor who has had to drag through miles of mud nearly hub deep, when he was urgently needed by a very sick patient, needs no other argument to convince him of the importance of good roads, but if all would drop a word now and then among that class who do the voting and the tax paying they would be planting the seed of education, which would ere long bring about a great reform in this direction.

Reviews and Book Potices.

Hay Fever.—Its successful Treatment. By W. C. Hollopeter, A. M., M. D., Clinical Professor of Pediatrics in the Medico-Chirurgical College of Philadelphia; etc.; etc. Cloth, one hundred and thirty-seven pages; price \$1. P. Blakiston's Sons & Co., Philadelphia, 1898.

In this little volume, which comes at a time when the disease of which it treats is most prevalent, the author has gone thoroughly into a study of the history, predisposing and exciting

causes, symptoms, pathology, and treatment of this very distressing and stubborn affection. While he admits the existence of an external irritant, he does not enable the reader to come to any definite conclusion as to what that may be; but he also claims that there is also usually an underlying systemic condition which renders individuals susceptible to the disease. He believes that the curability of the disease cannot be questioned and that in the majority of cases positive relief, without change of residence or inconvenience, can be afforded during the period of occurrence. His treatment is based upon the principle of aseptics by the means of local applications to the naso-pharynx and upon general systemic treatment.

Review of Current Literature.

GYNECOLOGY AND ABDOMINAL SURGERY.

IN CHARGE OF

H. S. Lотт, M. D.,

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GYNECOLOGICAL AXIOMS.—Never expect curettage alone to cure endometritis. It is only a preliminary expedient.

- 2. Never curette the uterus except under the strictest aseptic precautions in every detail, which includes shaving the pudendum.
- 3. Never use the sharp curette except at the internal os and in the cervical canal or to remove cancer tissue. It is both unnecessary and unwise.
- 4. Never attempt to remove the entire endometrium down to the muscular structure. If this is done scar tissue will supplant the mucous membrane. Is that the result desired?
- 5. Never curette as a routine measure, but always for a definite purpose; and be sure it is necessary.
- 6. Never forget that it is possible to do great damage with the curette, even perforate the uterine wall.
- 7. Never curette at the office and permit the patient to go home. It is dangerous and inflicts unnecessary suffering. There are other reasons that are self-evident.
- 8. Always explore the uterine cavity with the uterine speculum before or after curettage or both, to insure perfect work. The expert

may occasionally omit this, manipulation with the curette affording him sufficient information.

- Never pack gauze into the uterus as a routine measure. It should never be done unless there is some practical reason for it. Every case does not require it and in some instances it is positively contraindicated.
- 10. Never permit gauze to remain in the uterus longer than twenty-four or at most forty-eight hours. It ceases to drain by that time and the secretion will accumulate above it.
- 11. Never insert fresh gauze into the uterus until the cavity has been thorough irrigated to remove clots, loosened debris, mucus and sometimes, pus which has accumulated above and around that which is removed.
- 12. Always continue the irrigation of the uterine cavity, even after discontinuing the gauze, as long as there remains anything to be washed away or until a complete cure has been effected.
- 13. Never attempt to make an intra-uterine application with a cotton-wrapped applicator. The medication will not reach its destination and the application is uncertain and dangerous unless done through a uterine speculum which protects the cervical canal.
- 14. Never apply pure nitric acid, strong tincture of iodine or other caustics to the uterine cavity. It is unnecessary, harmful and barbarous. There is nothing gained by it.
- 15. Make all medicated applications, suitably diluted, to the interior of the uterus through a double current irrigator, and permit the excess to drain away before the instrument is withdrawn. This is definite, certain and effective.—A. H. Goelet, in N. E. Med. Monthly.

ATYPICAL APPENDICITIS. Hugh M. Taylor, (Md. Med. Jour.)—Typical appendicitis should be as easy to diagnose as typical pneumonia, etc. Unfortunately we meet with a good many atypical appendicular inflammations. Appendicitis and its sequences afford a number of surgical surprises. A perinephritic, perihepatic, subphrenic, mediastinal or pleuritic infection may have as a focus a post-cecal cellulitis, a product of appendicitis; while lumbar, iliac, prevesical, inguinal, scrotal or gluteal abscess may take their origin from the same source. Many of the psoas, lumbar and iliac abscesses of the past were really cases of post-cecal suppuration incident to appendicitis.

A case illustrating this point had just been operated upon by him. The patient, a male adult, had had an abscess discharging outside and below the iliac spine for three years. Several times by other surgeons the fistulous tract had been slit up to the abscess cavity, which randown into the pelvis toward the spine, packed and drainage tubes were worn almost constantly. Celiotomy by Dr. Taylor revealed a matted appendix, its distal end buried in an exudate and firmly fastened to the

iliac fascia in the iliac fossa; plainly an appendicitis was the starting point of the extra-peritoneal abscess.

Within the past few months among his cases of appendicitis it seemed to him that he had had more than his share of cases, which seemed to illustrate the very frequent erratic behavior of appendicitis. He would impress the idea that the surgeon who waits for classical symptoms in all cases, with no broken link in the chain of evidence, will overlook many until they have either convalesced from an attack or have passed beyond a safe operable stage. Classical symptoms and typical cases are the rule, but many cases would go unrecognized if such symptoms only were relied upon.

A case with erratic manifestations was recently seen with Drs. C. W. P. Brock and J. S. Wellford. A little boy was indisposed Wednesday and Thursday, but his physician was not called until Friday, and even at that time his symptoms were not pronounced and did not become so until Saturday night. When seen by Dr. Taylor Sunday evening there was vomiting, a tympanitic belly, a rectal temperature of 100 deg., a pulse of 150 and other evidences of profound toxemia, clearly stamping the case as fulminating in type. An immediate section revealed a gangrenous appendix. There had been no effort on the part of nature to wall off the focus of infection—no plastic peritonitis, resistance was completely overcome, serum was quickly changed to pus and septic suppurative peritonitis (diffuse) was in full blast. This case had been closely watched by experienced observers, and without warning had passed from a condition of subacute appendicitis to diffuse septic and suppurative peritonitis.

As is well known, an appendectomy in subacute appendicitis is minor surgery, while operative interference for the relief of diffuse septic or suppurative peritonitis is desperate surgery. Subacute appendicitis per se is a minor morbid condition, and if we could only know that it would remain subacute we could well afford to let it alone.

Will it remain subacute? Who can tell? No one. It is not within the power of the best diagnosticians to prognose that the subacute case may not within the hext hour change into virulent type and without the manifestations of distinctive symptoms. This is not, he claimed, an individual opinion. Per contra, it represents the advanced surgical thought of the day.

It is natural, he thought, but not logical, to wish to wait until the acute attack is over before operating, if we only knew it was going to recede. He had many times operated too late, but never too early. Suppose the case just cited had been operated upon within the first twenty-four hours, an appendectomy for subacute appendicitis would almost surely have been successful. Two experienced practitioners did what we all have done, i. e., failed, because of absence of pathognomonic symptoms, to recognize a progressive increase in the morbid changes.

As we cannot differentiate between the case which is going to develop

into a virulent type from one which will recede in a few days, is it right to procrastinate? Dr. Taylor unhesitatingly classed himself with the large majority of surgeons in saying no. Is it not better, he asked, to assume that in its incipiency even a case of appendicitis is strictly local, and that the highest mission of operative interference is to prevent the consequences of appendicitis, notably acute ileus through sepsis, chronic ileus through adhesions, as well as the immediate and imminent danger of diffused or circumscribed septic or suppurative peritonitis? Will it remain subacute?

A case recently seen with Dr. Edward McGuire and C. V. Carrington is an apt illustration of our inability to foreshadow the future in any subacute case.

A young woman was slightly sick Monday, Tuesday and Wednesday, with symptoms of appendicitis, but of such a mild type that a positive diagnosis hardly seemed warranted. Friday the condition assumed a grave aspect, but the symptoms were those of perihepatitis or pleuritis. The pain, sharp and lancinating in character, causing sharp grunting respirations, was focused over the lower portion of the right pleura and hepatic region. There was no right iliac rigidity or pain or tenderness. The tissue in the right iliac region could be pushed back to the spine without eliciting pain.

Here was a history of appendicitis, with the symptoms, i. e., pain, pulse rate, and respiration pointing to perihepatitis. A section revealed a dead and insensible appendix and suppurative peritonitis—no pain, no lump, no muscular rigidity and a gangrenous appendix. The ababsence of pain was easily explained—a dead appendix is painless. We should not expect to find a swelling in such a case; swelling must result from plastic peritonitis (local) and by plastic peritonitis matting the bowel and omentum or an exudate surrounding the appendix or walling in an abscess. No lymph is poured out in diffused suppuration or septic peritonitis, and hence we should expect no lump in the most virulent types of appendicitis unless an acute type is engrafted upon the chronic or recurring variety.

A case recently occurred in his own practice which illustrates the need for anxiety in any type of appendicitis. A male adult had been sick for several days with supposed gastro-intestinal disorder, attended by diarrhea. When his attention was called to it he admitted having had soreness about his appendix. Careful palpation failed to elicit pain, induration or muscular rigidity. He was told that there was a suspicion of appendicitis, but that the history and symptoms did not warrant a positive diagnosis of appendicitis. He was advised to remain quiet, adhere to rigid diet, keep his bowels open and was given some intestinal antiseptic. In ten days Dr. Taylor again saw him, and found a mass in the right iliac region as large as a turkey's egg; this had formed without increase of symptoms, while the patient was up and about and while he supposed himself rapidly recovering. A section revealed an appendix buried in exudation and a small abscess of recent formation.

Stereotyped cases of appendicitis are distressingly common and admittedly are the most important of the many morbid conditions occurring in the abdomen or pelvis. The typical cases of appendicitis, acute, subacute or relapsing, present a clinical picture so clearly portrayed that it should not often be wrongly misinterpreted—the sudden onset of diffused pain, reflex in character, soon followed by local tenderness and pain at some point within the circle, with the appendix as a radius. Vomiting (temporary), rigid right rectus muscle, with slight fever and rapid pulse, are classical symptoms. If this picture was presented in every instance we would have fewer mistakes in diagnosis and fewer cases in which operative interference is postponed until septic and diffused suppurative peritonitis has, in the majority of instances, hurled the patient beyond the restorative resources of surgery.

Dr. Taylor urged that an early operation is conservative in that it limits the amount of surgery needed to cure the patient. In the late operation our mission is so often to cure the consequences of appendicitis.

Appendicitie is a not an infrequent cause of ileus, both acute and chronic, and the chronic may suddenly become acute, as in the case just reported. Plastic peritonitis matting and angulating the bowels may cause acute ileus. Septic or suppurative peritonitis, with intestinal paresis and obstruction, is a not infrequent sequence, while the formation and adhesions and their ultimate contraction is a not infrequent source of acute and chronic ileus.

A case seen recently with his colleague, Prof. Moses D. Hoge, illustrates the fact that we not infrequently in appendicitis have marked symptoms, with slight macroscopic changes in the appendix. This young man had had one or more acute attacks, and for some months had been suffering constantly from chronic appendicitis. A section showed a surprisingly slight amount of damage to the appendix and surrounding structures. The appendix was unduly flexed and adherent to the cecum, but was but little changed, and in this, as in not a few other cases observed, the morbid change was so slight as to lead to the suspicion that a wrong diagnosis had been made.

This case further illustrates the fact that in many cases we can form no idea as to the damage done until a section is made. Mr. Treves emphasizes, and it is common experience, that one attack may do great damage in the matter of adhesions, while few, if any, may be found after a dozen attacks.

In striking contrast is the phenomenon, perhaps even more frequently met with, of extensive morbid changes in and about the appendix without alarming symptoms. He had more than once seen a normal temperature and pulse and natural faceal expression and soft, flat belly, and on section found a necrotic appendix. Time and again, with no local or constitutional symptoms, he has found, when operating during the interim of the attacks an abscess walled in by exudate. In two cases recently operated upon, both chronic in type, he had found tubercular infection of the appendix coexisting with tubercular peritonitis.

A case recently seen illustrates how difficult it often is to differentiate between appendicitis and salpingitis. The case had been variously diagnosed. A section showed both conditions to coexist, i. e., both tubal and appendicular

infection. He can only explain the not infrequent coinfection of the appendix and right tube, ovary or broad ligament, and the less frequent occurrence of appendicitis in women by conceding the presence of the appendicular ovarian ligament of Clado. The lymphatic connection through this ligament explains the dual infection, while the additional vascular supply comes to the rescue when the feeble circulation in the appendix is threatened.

He wishes in conclusion to emphasize:

- 1. The frequent irregular course pursued by appendicitis, and consequently the number of surgical surprises it affords.
- 2. Our inability to ascertain which case is going to recede, and not advance from bad to worse.
- 3. That early operative interference is conservative, in that it limits the amount of surgery needed.
- 4. That the so-called operable case of not a few practitioners is, in fact, a case which has passed beyond the operable stage.

An endorsement, even most heartily added, to the views of Dr. Taylor, is hardly necessary. However, I cannot refrain from emphasizing the fourth clause in his final summary; "That the so-called operable case of not a few practitioners is, in fact, a case which has passed beyond the operable stage."

This fact is due to a number of causes. The leading surgeons of today, the men who have done the most work, with pure, right motives, say operate, and also say operate early. In opposition to these is a class called "conservative" men, and while their conservatism is perfectly honest, it is largely due to a want of investigation into the present status, and possibilities, of abdominal surgery. There is yet another set of men, who constitute a class of veritable obstructionists; refusing to do the work themselves, they also refuse to grant to their patients the surgical relief to which the lights of today entitle them.

H. S. L.

Therapeutic bints.

ADMINISTRATION OF TRIONAL.—Dr. Habermann says that trional administered in a carbonated alkaline water is rendered more agreeable, and produces hypnotic effects in much smaller doses.

TURPENTINE FOR INTESTINAL HEMORRHAGE IN TYPHOID FEVER.—Dr. Jacob Price, in the *Philadelphia Polyclinic*, highly endorses the use of oil of turpentine, in large doses for the relief of hemorrhage in typhoid fever. He cites the case of a young man, who, after a moderately severe case of typhoid fever, had a hemorrhage in the night and passed 28 ounces of bright red blood before he could reach him. Half an ounce of

turpentine was quickly made into an emulsion with the yolk of an egg and 1½ ounces of water and all of this administered in five minutes. Another small hemorrhage occurred after this and the same dose was given and repeated again in about fifteen minutes. He has depended upon it for many years and not in a single instance has it failed to arrest the hemorrhage.

Motes and Items.

Dr J. I Campbell has removed from Mint Hill to New London, N. C.

Dr. Charles Carter, of Blowing Rock, N. C., died at Concordia, Pa., September 8, 1898, at the age of 62 years.

BEER-FLASKS FOR UNHYGIENIC FLUIDS.—The Brewers' and Bottlers' Association of Berlin has applied to the police department for the enactment of an ordinance forbidding the use of beer flasks for other than their original purposes. All sorts of noxious liquids, from alkalies and acids at the apothecaries, and shellac and turpentine at the paint shop, to urine for examination at the dispensaries, find their way into the bottles that are afterward returned to the bottling establishment to be refilled with beer. The Brewers' and Bottlers' Association asks that the introduction into such bottles of any substance liable to injure the health be made a punishable offence.—Phil. Med. Jour.

[Evidently the association expects to ship its beer hereafter in wood.]

• QUEER ORDERS.—A Jersey City druggist is making a collection of the queer orders he receives from people who send children to the store for things they need. Here are a few of them:

"This child is my little girl. I sent you five cents to buy two sitless powders for a groan up adult who is sike."

Another reads: "Five sense worse of Aunty Toxyn for to gargle babi's throte and obleage."

An anxious mother writes: "You will please give the leetle boi five cents worth of epaca for to throw up in a five months'old babe. N. B.—The babe has a core stommick." This one puzzled the druggist: "I have a cute pane in my child's diagram. Please give my son something to release it."

Another anxious mother wrote: "My little babey has eat up

it's father's parish plaster. Send an antedote quick as possible by the enclosed little girl."

The writer of this one was evidently in pain: "I haf a hot time in my insides and which I wood like to be extinguished. What is good for to extinguish it? The enclosed quarter is for the price of the extinguisher. Hurry, pleas.—Bull. of Phar.

A HELPER NOT A LEANER.—A writer tells how a little child once preached a wonderful sermop to him.

"Is your father at home?" I asked a small child on our village doctor's doorstep.

"No," he said, "he's away."

"Where do you think I could find him?"

"Well," he replied, with a considering air, "you've got to look for him some place where people are sick or hurt or something like that. I don't know where he is, but he's helping somewhere."—National Recorder.

HOSPITAL CORPS OF THE UNITED STATES ARMY. -At the outbreak of the war the hospital corps consisted of 100 hospital stewards and 520 privates. The larger part of this number was ordered with the troops that left their respective stations to the camps of concentration and accompanied the regular regiments in the 5th Army Corps to Cuba; the smaller part being left behind at the various Army Posts, and being just enough to take care of the medical property. Enlistments were at once ordered throughout the country of suitable men for the hospital-corps, special attention being paid to enlisting nurses, pharmacists, cooks, drivers, mechanics, etc. A good many medical students and young physicians were also accepted. By means of enlistments and afterward by transfers from volunteer regiments to the hospital-corps a large number of men were obtained, and today there are in service by actual count 5,084. Probably 1,000 are in service whose enlistment and transfer are not yet reported. In addition to the members of the hospital-corps enlisted for the purpose of taking care of the sick and wounded, there have been employed 141 male nurses and 386 female nurses under contract. - Philadelphia Medical Journal.

Reading Motices.

A HINT ON THE TREATMENT OF HEADACHES.—It is a familiar axiom that in union there is strength, and this often applies as much to drugs as other things, for it is frequently found that by joining two drugs having similar effects, much better results may be obtained than from one given singly. For instance, while caffeine has been found a most desirable remedy in the treatment of certain forms of headache, its beneficial effect may be greatly enhanced by associating it with another analgesic. A large number of preparations of this kind have been introduced, but the one to which especial attention is called here on account of its uniformly good results, is Hemicranin, a mixture of caffeine and phenacetin. In view of the fact that the latter drug has for many years enjoyed great popularity, its association with so valuable a cardiac stimulant and antineuralgic as caffeine furnishes an ideal preparation for the treatment of many forms of headache. Hemicranin has fully justified the expectation of its value based upon its chemical composition, and is highly recommended even in cases where other drugs have proved unsuccessful.

TRI-STATE MEDICAL SOCIETY.—The tenth annual meeting of the Tri-State Medical Society, of Alabama, Georgia and Tennessee, will be held at Birmingham, Ala., Tuesday, Wednesday and Thursday, October 25th, 26th and 27th, 1898.

WESTMINSTER, Cal., Aug. 11th, 1898.—The Tilden Co., St. Louis, Mo. Gentlemen—Enclosed find P. O. Money Order for \$1.00. Please send by return mail 1 oz. Tablets Hydrocyanate of Iron and Valerian. My case of epilepsy is doing fine, has had no trouble for the past three months and appears as well as he ever was. Works hard every day on hay bales, tying and litting heavy bales of hay. Will send full history of case when we get thrugh if you desire it. Respectfully,

F. E. WILSON.

A RELIABLE MEDICAL SCAVENGER.—The Elixer Six Iodides aids in elimination and in removing waste material from the diseased tissues. When the physician requires a reconstructive and tonic, he can pin his faith to this combination of the iodides.

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Original Communications.

MICROSCOPICAL DIAGNOSIS OF TYPHOID FEVER.*

By H. STUART MACLEAN, M D., Lecturer on Bacteriology, University of College of Medicine, Bacteriologist of Virginia Hospital, Richmond, Va., etc.

HE diagnosis of typhoid fever in obscure cases can often be confirmed by the use of the microscope. A positive diagnosis can be made by bacteriological examination of the stools, in which the typhoid bacilli will always be found. Unfortunately this method has not become generally used because of the time and labor as well as the variety of appliances necessary. Of late, however, the process has been simplified by the use of certain culture media upon which no bacteria but the typhoid and colon bacilla will grow. Elsner's method consists in the use of a mixture of gelatin, potato juice and iodide of potash, acid in reaction from acids normally present in the potato. Upon this and other similar substances the development of the ordinary liquifying saprophytes does not occur, and a process which formerly took days of investigation and a large array of apparatus, may now be done in much less time and with a very simple outfit.

The bacilli occur in the urine in about 25 per cent. of the cases, hence examination of the urine is apt to be negative. The infected urine usually contains albumen, although in a

^{*}Read at the meeting of the Medical Society of Virginia, Virginia Beach, August 31, 1898.

few cases it has not been present. Late in the disease the bacilli are apt to appear in great numbers. The importance of this observation lies in the necessity for the disinfection of the urine.

A most valuable confirmatory test which is very seldom used Cabot, (†) in speaking of typhoid is examination of the blood. fever, says, "There are few diseases (outside of those known as diseases of the blood itself), in which the blood count is so often of value in diagnosis. The diagnosis of typhoid fever is to be made by exclusion—exclusion of other causes of fever and of local inflammatory processes in particular"—"almost all local inflammatory processes have leucocytosis while typhoid (uncomolicated) does not." In two cases which clinically appeared to be typhoid blood counts showed marked and presistent leucocytosis, and further developments proved them to be cases of abscess of the liver. This forcibly illustrates the value of blood examination for any deep-seated suppuration. In other cases the blood count has rightly differentiated between typhoid and appendicitis. Late in the disease various complications, such as otitis media, perforation, or abscess, will lessen the value of this symptom, but in the early stages the absence of leucocytosis is strong confirmation of a diagnosis of typhoid.

Examination of the blood is indispensable in differentiating typhoid from malaria. The absence of the parasite after careful search being both proof that the case is not malaria and strongly confirmatory of typhoid, as these are most frequently

Occasionally the typhoid bacilli may be found in the blood but so seldom as to render no assistance, and only in typical and severe cases.

Widal's reaction is the most uniformly reliable test at our command. Even this reaction has failed in some few atypical cases. Dr. W. G. Thompson names 23 as the per cent. of possible error. This is not in accordance with the experience of many writers. His high per cent. of failures is probably due to the fact that he believes the test to succeed in 12 per cent. where it ought to fail. If the test be properly applied; accurate dilution employed; and the previous history of the patient as certained with reference to a previous attack of typhoid, such †Clinical Examination of the Blood.

is not the case. Cabot says "Out of over 1,000 cases of various diseases not typhoid, but four have been proved to clump typhoid bacilli with proper technique;" and he suggests that even this small error may be avoided by improved technique. The method of applying this test is familiar to you all, consisting in the addition of fresh or dried blood, or blood-serum from the suspected case, to a twelve to twenty-four hour peptone bouillion culture of the typhoid bacillus, in a proportion varying from 1-10 to 1-200. Upon examining a hanging drop slide of this mixture, if the case be typhoid, it will be noticed that the bacteria gradually move more slowly and gather in groups, uitimately forming large, compact clumps, with few or many bacilli lying between depending upon the completeness of the reaction. In a typical marked reaction there are no free bacilli. and all motion is lost, in so-called pseudo-reactions there is only partial clumping and partial loss of reaction. The reaction may take place immediately or may delay for some hours. The cause of this agglutination, of the significance of which there can be no doubt, it is not definitely understood. It is not due to the motility or any other vital force of the bacilli, and Widal and Sigard (1) have demonstrated that typhoid bacilli in bouillion. Paper read before the Society of Biology, Paris, February, 1897. destroyed by the application of a low temperature, or the addition of a small quantity of formal, may be used in place of the fresh culture. Unless the culture thus "enbalmed," as Cabot calls it is an active, fresh one the results are not so re-This clearly proves that the action of the serum is not It has likewise been demonstrated by applying the serum of Arabs, in whom the disease is singularly rare, to cultures of typhoid bacilli with negative results, that the agglutinizing power of the blood is not necessarily connected with either natural or acquired immunity. It seems most likely that it represents the presence of active defensive agents produced in the course of an infection.

While I do not intend to describe the process in detail I wish to call attention to one step. In making the test I have always used the serum obtained from a small flying blister. The fresh blood method obscures the field, while the use of dried blood is inexact and the fibrin leads to false clumping. When the blister has formed sufficiently I withdraw the serum in a glass bulb,

which is afterwards sealed at both ends. This bulb is made from an ordinary medicine dropper or a piece of glass tubing. The end is drawn out finely and sealed. Then at a point about one inch distant it is again drawn finely, care being taken not to occlude the lumen of the tube here. We now have a small chamber connected with the rest of the tube by a very fine opening and sealed at the distal end. When about to draw the serum the sealed end is broken off and the point is plunged into the blister, when suction is applied either directly to the glass or through a rubber tube, and the bulb filled. Both ends are now sealed in the flame and the bulb may be safely sent through the mail to a bacteriologist or may be kept indefinitely for the purpose of demonstration as during its preparation it is necessarily rendered sterile. This method has recommended itself to me because it allows of accurate and simple technique and by its efficacy.

During the past year I have been called upon to apply Widal's test in 28 cases and in 27 of these the further clinical course has substantiated the microscopic diagnosis. One case, examined upon the 12th day, did not give the characteristic reaction, and the case ran a typical typhoid course. Unfortunately I did not have the opportunity for making another test. These, I might add, were almost all cases in which some doubt was entertained as to the nature of the disease.

The profession at large have in the main failed to utilize microscopical methods as aids to accurate diagnosis apparently not because of any knowledge that they are unreliable, but simply through indifference, not realizing that while the laboratory worker may work out these various methods, yet the task of applying them and proving their efficacy most assuredly lies with the practicing physician. Neither is it sufficient to show that a given test is subject to some variation or occasional error, to warrant its rejection; the physician should demonstrate what value there is in it and then use it as occasion arises.

The general practitioner now must use the microscope as he does the thermometer and stethoscope, or have resource to some properly equipped laboratory. It is impracticable that every case be referred to a microscopist. The physician can and now must do much of it himself if he would give the

patient the benefit of every means that will aid in the diagnosis or treatment of the case.

In closing let me emphasize a few points:

- (1) The absence of leucocytosis is strong evidence that an existing fever is typhoid, malarial fever being excluded by absence of the plasmodium.
- (2) If leucocytosis does occur in the course of an unmistakable case of typhoid it indicates some untoward complication.
- (3) Both feces and urine should be carefully disinfected throughout the course of the disease. Too often directions to this effect are omitted by attending physicians.
- (4) Widal's reaction is diagnostic in many cases in which, at the time, the clinical findings are obscure.
- (5) The value of serum diagnosis, as well as other methods, must be determined by the practitioner who controls the case upon whom the tests may be made.

SOME PRACTICAL POINTS ON LOCAL ANÆSTHESIA.

By Dr. John F. Woodward, M. D., Norfolk, Va.

THIS paper will refer to local anæsthesia in the eye, ear, nose and throat work, as it is in this line that I have used it most. Cocaine having held regular sway for so many years, as a typical anæsthetic, my remarks will refer especially to this drug in contrast with other drugs now on the market, claiming properties equal to, or surpassing it, viz., Cocaine Hydrochlorate and the alkaloid; Eucaine; Holocaine; Orthoform.

These five drugs are used to produce local anæsthesia in the majority of cases first one and then another finding favor with different doctors. An extensive clinical experience and a liberal use of these drugs in my office work enables me to appreciate to its fullest extent the great value of local anæsthesia. Excruciating pain, which the patient often stands without a murmer, is unnecessary, and the means of preventing it usually harmless.

First, we will take up cocaine. Its origin, doses and solutions you are no doubt familiar with, but probably not with its value

^{*}Read before the Seaboard Medical Society.

and dangers. Use the hydrochlorate in making watery solutions and the alkaloid in making oily solutions. Strength for local use 5% to 20%, for subcutaneous injections from 1% to 3%. There is a growing tendency to taboo cocaine, simply because manufacturers of other drugs having a very similar effect contrast the drugs to the discredit of cocaine, magnifying its dangers and limiting its uses. It is dangerous I freely admit, but it is oftener the fault of the surgeon than the drug. I have found nothing to take its place in toto, while several of the new preparations have properties that supplant cocaine. You will note these differences as I proceed.

It is the surface covered by cocaine rather than the strength used that calls for care, so I use a probe with a piece of cotton twisted on the end, saturate this in the solution and apply to the surface every two minutes. After three or four applications I can do most nose and throat work, using 5% to 20% solutions. In eye work this can be done too, after putting one or two drops in the junctival folds. By this process in the nose and throat we avoid getting the cocaine disseminated over the throat. causing nausea and a sense of suffocatian. Cocaine acts very promptly upon the terminals of the sensory nerves and paralyzes them, thus causing contraction of the non-striated muscular fibers producing almost complete depletion of the surface; the mucous membrane is reduced and swollen turbinates shrunken. an advantage that cocaine has over its sustitutes. In nasal examinations a 40% solution can be used to gain space, but even this is not always desirable as it masks some of the valuable symptoms. It has a bitter taste and often cures nausea: and when placed by accident or design into the larynx it often causes unnecessary alarm by producing hoarseness and a constriction of the throat that almost amounts to suffocation in nervous patients. Tell them that it is harmless and will soon wear off. Cocaine is borne well by children, and like Dr. McGuire I am inclined to think they stand it better than adults. Patients suffering from respiratory, or heart diseases, diseases of the arteries or neurasthenia, or who are very susceptible to drugs. require care in the use of cocaine in any form.

In subcutaneous injections deprive the parts of as much blood as possible, and then carefully inject a few drops of a 2% solu-

tion into the cellular tissue, repeating this several times, when the parts will be thoroughly anæsthetized; then make your cutaneous incision. After this use a swab of a 10% solution every few minutes during the operation, the blood will wash away the surplus of cocaine and a minimum amount will be absorbed. Always be careful with your first application, and you can avoid bad results. The toxic symptoms begin with exhilaration, loquacity and hallucinations and are speedily followed by pallor, perspiration on the forehead, faintness and depression. These symptoms are combated by withdrawal of the drug, stimulants and the logical antidotes, morphia, atropia, chloral, amylnitrate, chloroform, etc.

In the eye cocaine produces mydriasis, hypercemia and molecular disturbance of the anterior epithelium of the cornea, though its effect does not extend into the deeper tissues of the eye, as in some of the other preparations. It reduces ocular tension. It is painful when first put in the eye and should not be dropped directly on the cornea. Plastic operations, tracheotomy when not in a hurry, removal of tumors and many other operations may be done with safety.

Now we take up Tropocaine.

Tropocaine was first obtained from the Javenese coca leaves; now it is gotten synthetically by the decomposition of atropine and hyoscyamine. It appears in colorless crystals and is readily soluble in water. Strength of solutions used, I per cent, to io per cent., though 2 per cent. to 6 per cent. solution are mostly used. Anæsthesia is prompt-quicker than cocaine. The anæsthetic condition lasts longer than cocaine. The primary irritation and consequent hyperæmia less than cocaine. seldom occurs, and then accommodation is not affected. solutions are slightly antiseptic and more durable than cocaine. It does not reduce ocular tension. It depresses the motor ganglia of the heart to some extent. The deeper tissues of the eye are affected. It does not reduce capillary circulation like cocaine, hence it does not reduce swelling. The epithelium of the cornea is not affected. Its influence upon the throat is as decided as that of cocaine, but is not disagreeable. The primary effect is about the same as cocaine. It is less dangerous than cocaine by half.

Thus you see it is safer than cocaine; solutions are antiseptic

and keep well; it does not produce mydriasis; it is used in smaller solutions; no after affects, thus presenting many advantages over cocaine and falling short on others.

Eucaine is a synthetic alkaloid with many properties similar to cocaine. Solutions used, 2 to 10 per cent. It is not very soluble, but the 5gr. soloids of the hydrochloride are soluble. The primary irritation, even in very w ak solutions is much greater than cocaine. It is non-toxic and a good substitute for cocaine, when that drug is not well borne. The after affects subside more promptly than cocaine. No difference in hemorrhage. The disagreeable effects upon the throat are less than cocaine. It stimulates the glands of the nose and throat and increases mucous and salivary discharge. It is not as prompt in effect as cocaine. It produces primary and temporary hyperæmia, and reduces to some extent the enlarged turbinates. Its non-toxicity and absence of after affects are its only recommendations, except in subcutaneous injections where it is very useful.

Holocaine is a synthetic alkaloid compound from the paraphenetidin, therefore akin to phenacetine. It is soluble as a hydro-chloride, and it is used in 1 to 4 per cent. solutions; is antiseptic, and therefore forms permanent solutions; is cheap; is non-toxic; is almost tasteless; does not contract the blood vessels; does not produce nervous manifestations; does not affect the accommodation; does not produce mydriasis; is more prompt in action than cocaine; will produce anæsthesia in an inflamed surface. In some cases the primary effect is painful and hyperæmia decided. It affects the deep tissues of the eye and renders iridectomy painless. It does not affect the corneal epithelium. It produces no bitter and nauseating sensation in the throat; no nervous excitement; no reduction of swelling; no disturbance of blood vessels; no intoxication; and is more prompt than cocaine. I use it almost entirely in throat work.

Orthoform is one of the newest local anæsthetics. Einhorn and Heinz found that all aromatic oxyamido-esters produce anæsthesi, and that the methyl-ester of para-amido-meta-oxybenzoic acid possessed the essential conditions of a perfect local anæsthetic, that is, slow absorption and non toxicity, and named it orthoform. It is a white crystalline powder, odorless, and slightly soluble in water. It is non-toxic used pure, and in solutions or salves in 10 to 30 per cent. It is antiseptic, prevents

putrifaction and fermentation. I have used it freely in powder and salve, and find it a most useful anæsthetic. In ulcers and other painful affection of the eye or lids a 10 per cent. salve will give relief for from 12 to 24 hours. In nose and throat operations, or in painful diseases as in cancer and phthisis of the throat the powder or salve will give longer relief from pain than any drug I know. It is painful when first applied, but this wears off in a few minutes and a decided anæsthetic state will remain for a long time. Its perfect safety and its antiseptic properties make it of great use.

This hasty review will show you that cocaine has come to stay, and that no drug to date can supplant it entirely. Though as an ideal anæsthetic it has many faults.

The definite knowledge of chemical reactions, and the new compounds that it is thus possible to obtain from simple substances, seem astounding to us when we think of the poverty of the pharmacopæas of the past. In this high art of analytical and synthetical structural and analagous grouping of definite compounds, with specific properties antisepticism and painlessness are side partners in warfare against disease and pain.

The drugs referred to above produce anæsthesia, more or less profound, according to the drug, or combination of drugs used, hence every operator should be guided to a great extent by the individual effects and results produced. The same drug, in the same person, in the same strength, will not always have the same effect. This should be remembered and allowances made; as the physical and hence the neurotic state, is not always at equipoise, a tilting of the scales in either direction may account for peculiar manifestations of the same drug at different times. Dangerous symptoms in both general and local anæsthesia are often the expression of individual idiosyncracies, rather than the improper use of a drug. But this should be anticipated and not come unexpected. With a routine practice amongst different individuals, essentially differently constituted, casualties are to be looked for and properly met.

The invasions of pain are often more disastrous than the ravages of the disease, hence to relieve pain is essentially a doctor's duty. The means by which this relief is obtained, like all other boons to humanity, have shared the vicissitudes of early life. Let credit go to whom it is due, it is more essential to know

how to relieve pain than to know who discovered the means. It would be interesting to science, however, to know why chloroform makes an Irishman "cuss," and a negro lapse into pious hallelujahs, yet it is not essential if the Irishman suffers no pain, and the negro is oblivious to the stroke of the knite.

Thanks to chemical research, relief from pain is no longer a doubt, but merely a matter of choice of drugs; and the doctor, who causes pain for the want of effort to prevent it, has his clientele limited to those who believe that fire drives out fire, and pain and nausea are the necessary accompaniments and natural results of the use of steel and drugs, and the only outward evidence of their efficacy.

Relief from pain gives confidence and assurance to the patient, and takes a great burden from the doctor's shoulders. man's worst enemy, relief from it is his sweetest joy. Is there a more touching picture in life's road of sorrow than the gratitude shown by the relieved to the one who relieves? No; there is a living death, a torture, a wreaking of certain vengence upon frail humanity, often the penalty of heredity, a grinding and tearing sorrow, a friendless and unrelenting foe, a destroyer of comfort and a converter of joy and delight into a wilderness of tears and woe. It is pain, to escape which the human mind is ever on the alert, while the names of Long and Morton, the fathers of anæsthesia, had evoked more prayers than the Delphic dome. It is confidence that turns the prattling lips and dimpled hands from the mother's to the doctor's arms—one stroke of pain on the part of the doctor will shatter this. It is the assurance that pair is to be relieved that turns the pinched and woeful features to smiles of joy when the doctor enters the sick room. Make this a delusion by clumsy use of drugs, and the joyful smile recedes probably never to return. 'Tis not the fear of death, for high Heaven be praised, this is not the last thought of the sick, but it is pain, fleeting, boring, darting, stabbing, grinding pain that causes the soul to long for rest—the mind to cry out for surcease, and the body to twist and roll in agony. It is then that the word relief is the largest word in any language, and conveys all there is of hope. Relief from physical suffering! What a boon! What peace! From whence this charm; this release from jaws worse than death-from what fountain flows this soothing sense, which restores to a dark and

gloomy soul once more light and beauty, peace and content, and snatches the soul, the mind, from a very hell, death, raving, dispair, madness and insanity? From all this there is escape, but how shall it be obtained? I feel that there is not a doctor in this assemblage who would return to the good old days of the thumb lance and pain, and I am very confident that we blush with shame for any man who armed with a dipolma and a hypogoes abroad disguising his ignorance and masking the most important symptoms by placing his unfortunate and confiding patient into a blissful state of oblivion.

Nothing will raise you higher in the estimation of your patient nothing will bind them closer to you, nothing will establish a more lasting, and a firmer confidence than a skillful knowledge of how, and when to use local and general anæsthesia.

35 Granby.

Selected Papers.

PRACTICAL MICROSCOPY AND BACTERIOLOGY FOR THE PHYSICIAN.*

By W. N. SHERMAN, M. D., Merced, Cal.

VERY Practitioner of Medicine should be a student, pursuing constantly the study of some practical subject in a methodical way. With advanced medical education must come increased demands and earnest effort, toward acquiring the essentials of an up-to-date medical practitioner.

Increased competition, lower fees, poor patients, too often prohibit the ambition of the physician for better opportunities for self-improvement—a post-graduate course or special instruction, and he must content himself with acquiring coveted knowledge by his own individual effort, and at such times as his too often arduous work will permit. It is my desire to point out the way and briefly show some of the advantages in possessing special knowledge in one of the now most important scientific branches of our profession.

No instrument yet devised by the ingenuity of man, equals

^{*}Read before the Medical Society of the State of California.

the microscope in its universal application to research in the broad domain of Science, and its practical relation to medicine is well known.

The greatest advances made in placing scientific medicine on its true foundation dates from the application of the microscope to physiological investigations. The microscope alone reveals the true nature of many diseases—and it is a beautiful and useful thing to settle so many points that are a great trouble to the physician.

The younger graduates in medicine have received instruction in practical microscopy and bacteriology, but the older ones did not enjoy the same advantages when pursuing their medical education, hence, if he expects to continue his calling as an up to date man, he must dig it out himself with the aid of good modern text books, and earnest personal effort. This is not a difficult matter if given intelligent study. We too often imagine a scientific subject hard to master, but after starting we are surprised that our interest and pleasure in the subject has made it easy, and gradually and almost unconsciously we progress toward the end of a complete and practical knowledge of our subject.

The first necessity is a good modern instrument and a few good objectives, this is vital to success, for inferior instruments will only hinder and discourage the worker.

With a little attention to details and the directions furnished with instruments one is soon able to acquire sufficient skill in manipulation to begin the study of simple objects. Starting with such clinical work as the microscopical examination of urine and a careful study of urinary crystals and deposits, tube casts, pus corpuscles, etc. One is soon ready and anxious to take up a higher class of work such as the examination of the blood. With these studies one may soon acquire sufficient skill in the manipulation of a good instrument to do all ordinary work in practical microscopy. As the interest increases the pleasure also grows, and one soon finds his enthusiasm a strong stimulant to greater effort and better work.

We shall briefly allude to a few of the uses of the microscope which serve to make us better physicians, to increase our interest in our calling, to make us more able and scientific, and more worthy of the confidence and esteem of our fellow practioners and our patrons. The microscope will be found of great service in the diagnosis and prognosis of disease and a trusty guide to point out indications for treatment. Probably the most frequent use will be the examination of sputa for the tubercle bacilli.

This is the quickest and surest method of diagnosis and the best guide as to the progress of a case under treatment. Sometimes the sputh reveals streptococcus infection which is an indication for treatment by an anti-streptococcus serum. The same test and treatment has been very successful in many forms of septicæmia. The subject of hæmatology is of itself a vast field for study. It has become an important matter in the diagnosis and treatment of many diseases and is the only reliable method of differentiating idiopathic anæmias, pernicious anæmia, leukæmia, and the various forms and degrees of blood impoverishment. The discovery of bacteria and other microorganisms in the blood has prompted more frequent examination and careful study of this vital fluid.

Ehrlich's method of staining blood corpuscles has widened our knowledge of the part played by the phagocyte in its warfare against bacterial invasion.

Virchow's teaching of the emigration of the white cell in pathological processes, and Schultze's observation of the morphological dissimilarity of the white cells in circulating blood, are important advances in hæmatology, which we cannot afford to ignore. So many conditions and diseases are illuminated by a careful study of the blood that it has become a very important and valuable procedure in medical diagnosis.

The Widal test applied to the blood of typhoid fever patients has become a reliable means of diagnosis and is used by the Board of Health of the city of New York as the official test.

Before attempting to work with the microscope in clinical or other studies, it is essential to future success, and good work, that one should become thoroughly acquainted with the microscope and its manipulation and learn how to see with the microscope. The fact of having a fine instrument and accessories in our possession is not evidence of knowledge how to use it and work with it. It is well for the medical microscopist to commence with the primitive forms of life and to observe and study them closely. The study of the white blood corpuscles can

never mean much to the man who has never studied the Amæba, still there is no reason why every medical man or student should not frequently see this primitive form of life so nearly representing true active protoplasm. Amæba are easily obtained from the horse-trough, pond or ditches, and may be observed undergoing their characteristic changes of form-and to the student of phagocitosis, examples can be offered of Amæbas devouring bacilli, some thriving on them, and others dying from the poison developed by the injested bacteria. It is not alone the white blood corpuscles whose prototype is found in our ponds and ditches. The action of cilia, or ciliated epithelium, is difficult to see and understand, yet the vorticilla, a comparatively large organism, will nicely illustrate a cell of ciliated epithelium. This one celled animal when expanded presents a cup-shaped form whose motion is capable of creating currents to or from this cup.

The fresh water Algæ present a good example of pro-creation in its earliest development. The Diatoms offer a fascinating field of study and are valuable as test objects, and teach us to observe fine, delicate outlines and structure and to test the defining and resolving power of our objectives. They are common and may be found in both fresh and salt water, in oyster juice, in polishing powder, earth sand, and in our drinking water. They are a profitable study to the medical man who desires to master his instrument and will teach him to judge accurately the value of what he sees, and to gain a clearer insight into the life of individual cells than he can ever learn from the more practical medical microscopy of the schools.

Were it permissible at this time I might continue to multiply instances of the practical utility of microscopic knowledge in clinical investigations and thereby show its ultimate association with the everyday work of the practicing physician, and the great benefit derived from it.

The efforts being made in favor of pure food must necessarily bring the scientific physician into the field of research, and his services will be required to assist the proper authorities in their regulation of this matter. He should be able to detect adulteration in nearly all forms of food products. The public regard him as a guardian of their health. To merit the confidence imposed in him he must of necessity know something of these

questions and how to investigate them. A special microscopist or chemist cannot reside in every country village, and the simple forms of this work must be done by the physician. He should be able, by modern methods, to detect a tuberculous cow, and to analyze and examine infected milk. At present an overwhelming weight of evidence points to the presence of bacilli in milk of infected cows. It is not necessary that tuberculous ulcers shall be present in the udders. Bacilli have been demonstrated in the milk from udders without tuberculous lesions discoverable to the naked eye. One should be able to carefully make the tuberculine test, and if necessary to verify it after death by a microscopical examination.

He should be able to inspect meat, and to detect impurities in lard, spices, starches and various other food products. In the great pork-packing establishments of Chicago, female microscopists are constantly employed, and from each slaughtered hog a snall piece of diaphram is extracted and placed under the microscope in order to detect the trichinal spiralis if present. This was made necessary by the foreign discrimination against our meat products. It is high time we at home took some such steps to protect ourselves, and demand an official inspection of all meat sold to the public be passed upon by a competent officer, and the physician must prove the best qualified person for this work, if he is well informed in microscopy and bacteriology.

With the constant advances of sanitary science there will be increased demands for the services of scientific physicians in the country as well as in the city.

I need not dwell upon the use of the microscope in the detection of adulterants in drugs. The physician is often called as an expert, and if he is able to use the microscope in its application to forencic medisine, his knowledge will be in demand and his evidence of greater value. The micro chemistry of poisons is of itself a vast field of research.

The detection of crime is often made easy by means of the microscope in honest and skillful hands. It may be of great value in detecting erasures and changes in manuscript, the character of ink, lead pencils, tracings, and the detection of forged signatures. Your neighboring vinyardist may call upon you to diagnose the grape disease, find the phylloxera, or parasites, sidium anthricasis. The application to agriculture, horticulture,

viticulture, minerology, contagious diseases of chemical investigations of poisons, etc., might be perfectly dwelt upon did time permit.

For the ambitious investigator or student there is a vast field for investigation outside the limits of medical microscopy.

There is scarcely a microscopic object whose every detail can not, with the camera's aid, be reproduced on paper; hence the great value of photo-micrographs for illustrations or reproductions. Glass negatives of microscopic objects have been admitted as evidence in courts of justice. From such negatives the lantern slide may be made and the same object be projected upon canvass screens by means of sunlight or electric light and its valuable method of teaching classes and illustrating lectures. Charcot illustrated pathological conditions in his clinical lectures in this manner and it was looked upon as a marvelous, novel and attractive method of teaching, and remains unsur passed to this day.

The use of the microscope in the detection of crime presents a profound and interesting subject for the physician as an expert. The identification of blood stains, stains, hair, fiber, etc., often leads to the discovery of the guilty one and has given to the microscope its reputation as an "unerring detective."

What shall we say in regard to practical bacteriology for the physician? In modern clinical diagnosis and the application of pathological methods, microscopy and bacteriology are so intimately associated as to be inseparable.

In the physician's laboratory the microscope and culture tube go together. If we expect to keep abreast of the times and give our patients the benefit of modern medical science we must be able to at least solve the ordinary clinical problem of the laboratory. Our microscope must be a modern instrument to be used alongside the clinical thermometer and the stethoscope. It is as necessary in general practice as aseptic procedure in surgical practice.

The prevailing opinion that the necessary laboratory apparatus are intricate and expensive is an error. It can be furnished in a simple, inexpensive manner, and the essential laboratory equipment, like the essential knowledge of its manipulation may be gradually acquired.

The items of expense are not an obstacle, for any ingenious mind may devise, and a skillful hand construct most of the neces sary apparatus. Aside from a good microscope, stand and good objectives, a microtome, Hæmatokrit and centrifuge are desirable, and the incubator, sterilizer and water bath are indispensible. A sharp razor, a cork, and a little paraffin, answer the purpose of a modest beginner until he is able to afford a hand or machine microtome. For a centrifuge the tubes may be purchased for a trifle, and their adjustment to a rapid rotating apparatus can be improvised. If one can command a small electric motor, it is an improvement over a hand apparatus. The Arnold Steam Sterilizer is a cheap and efficient device and may be used for sterilizing surgical instruments also. not attainable one may use an ordinary Hoffman's Iron Water bath, and upon it place a copper pail with perforated bottom and an inside rack for holding the tubes. When the steam escapes from the tube in the cover it is evidence of the proper interior temperature. The oven of a small gasoline stove answers the purpose of a dry sterilizer and incubator. The chemical reagents and glassware are simple and inexpensive, the large cities now afferd special instructors in bacteriology, but when one can not afford the time and means for such a course, he must content himself with the only resources left, viz., to work it out by practice alone, with the aid of a few good books.

Every general practitioner should possess the ability to give to his patients the benefit of as thorough diagnosis and scientific treatment as a progressive science affords. At the present time there is no excuse for the physician who does not prepare himself to perform thoroughly, the work demanded in routine daily practice. Two of the most common errors in diagnosis apply to typhoid fever and diphtheria both of which are easily recognized by means of laboratory methods. The clinical impossibility of making an accurate diagnosis of diphtheria without a bacterological examination should prove an inducement to a progressive physician to equip his own laboratory, for accurate examinations. Boards of health in cities often supply the physician with sterilized test tubes and swab for collecting material from suspicious cases when they are returned for laboratory examination and report. Where such advantages are not available. as in country practice, a careful bacteriologist might make a

satisfactory examination with a bake oven, wash boiler and other kitchen utensils as substitutes for the regular sterilizers and incubator.

These same truths apply to many other diseases common to everyday practice. If time does not permit the making of the various necessary culture mediums, they may be obtained ready for use from some nearby bacteriologist. Gelatin, agar, blood serum, etc., may be preserved for a long time by taking the following additional precaution which shortens the labor of frequent preparation. Test tubes are cleaned, plugged in the ordinary way, except the cotton is only one-half the usual length. They are then sterilized in a hot-air sterilizer and filled immediately; after filling, the cotton plug is pushed into the tube half an inch below the top and the plug of antiseptic cotton put over it. After thorough sterilization the tubes are closed with a rubber cap and placed in an air-tight fruit jar to prevent evaporation. The antiseptic cotton used for this purpose is best soaked in a solution of water 100, alcohol 20, and copper sulphate 3, then dried slowly. This plea for the physician's clinical laboratory is prompted by an earnest desire for its adoption by the whole profession, and if I may convince them that there is ro obstacle in the way, my object has been fulfilled.

POSTPRANDIAL ORATORY.—The Philadelphia Medical Journal thinks after-dinner speeches do more to cause dyspepsia than the long-drawn-out eating and drinking. It acts unfavorably both upon the speakers who are in distress until the awful hour is over and to the poor hearers who feel they must sit and listen and even applaud, or else slip out impolitely at the side door. It favors the suggestion offered by the Practitioner that we hire professional orators to do our speaking as we hire professional artists to sing for us.

A Good Location.—We are advised of a good location awaiting some well equipped, steady young physician. Information in regard to the locality can be had from Mr. E. J. Spaugh, Friedburg, Davidson Co., N. C.

NORTH CAROLINA MEDICAL JOURNAL.

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Editorial.

MATERNAL IMPRESSIONS.

It seems strange that in this age of enlightenment and civilization this relic of witchcraft and demonology should still have so firm a hold upon educated people, even members of the medical profession being victims to the delusion. In the *Medical Record* for September 3, 1898, is the report of case in point. A little girl of six years has a misshaped head, the forchead being very prominent and running to a point a little to the left of the center, the entire right side of the head is poorly developed, and there is a blepharo-phimosis of the right eye, the eyeball being turned decidedly upward. Says the reporter "With regard to

the cause, which is the interesting part, I learned the following: The mother, when about two months pregnant saw her husband, who is a butcher, killing a cow. He had hit it on the head with an axe, crushing in the rough side and causing the upturned eye to protrude. She hurried away, but the sight made a deep impression upon her. Cause and effect seem certainly connected in this case."

How any thoughtful person, and especially an educated physician, who is informed in regard to the physiology of conception and pregnancy can be deluded by such tomfoolery we cannot understand. A pregnant woman is naturally very solicitous in regard to her unborn child, and weighs with undue concern every suggestion that is vouchsafed by the "experienced grandmother" and the wise and mysterious old granny, and when there happens to be a malformation the whole experience of the preceding nine months is gone over carefully to find the cause, still in nine cases out of ten there can be found nothing to which it could be attributed. This may be pardoned to some extent in the women—it is simply some of the old-time superstitions that education has not yet succeeded in rooting out. We think, however, that it is inexcusable for the physician to sanction any such nonsense. Such an idea on the part of the expectant mother adds to her discomfort during the months of her pregnancy, and oftentimes prompts her to neglect necessary exercise, lest she should see something that world mar the form All the influence that the mother's mind can have upon the development of the child ceases when the ovum has been expelled into the fallopian tube. That unknown and mysterious something that makes the child resemble its mother in feature, and form, .nd even in gait and voice is there already. The fœtus is not a part of its mother; it has an independent circulation. Its development in utero cannot be influenced by the mother's mind any more than can its development while nursing at her breast. In either case the child simply draws its nourishment from the mother.

Were there any truth in the influence of mental in pressions upon the development of the child, there would be almost never a well-developed child, for there are very few women who go through the nine months of pregnancy without seeing something which makes "a deep impression on her."

WAR INVESTIGATION COMMITTEE.

In compliance with the demand of the public press and with public sentiment the President has appointed a committee to investigate the management of the little disturbance that has recently attracted the attention of some of the people of the United States. This committee was not completed without considerable trouble, for quite a number of gentlemen who were invited to become members declined with thanks—for business reasons; they said, mostly. The committee as now constituted consists of the following gentlemen: Gen. Grenville M. Dodge, Capt. Jas. A. Sexton, Ex-Gov. Orban A. Woodbury, Gen. John M. Wilson, Gen. James A. Beaver, Charles Denby; Esq., Gen. Alexander McD. McCook, Capt. Evan P. Howell, and Dr. P. S. Conner.

It is intended that this Committee shall look into all the abuses that occurred during the war and to ascertain who was to blame therefor. It seems, however, that the Committee is not vested with power to require the attendance of witnesses, to punish false testimony, or to demand the use of papers, though the President has promised to do all in his power to supply such as they need. All the Departments of the Army are to be investigated, but as there has been more criticism of the Medical Department this will receive the greater part of the Committee's attention. A list of questions have been submitted to the heads of the various departments to be answered.

If the men who gave their services at their country's call, many of them giving up lucrative positions, have suffered sickness and death through the negligence of their superior officers, those to blame should be rigorously dealt with. However, we still believe that nearly all of the evil reports have their origin in the imagination of the reporters of the great yellow journals which live on sensationalism. We await with interest the result of the investigation.

DR. J. P. MUNROE has made arrangements for the establishment of a hospital in connection with the North Carolina Medical College at Davidson.

Therapeutic bints.

THE USE OF THE HAND IN OBSTETRICS.—It will be objected that the danger of introducing septic germs with the hand is such as to offset any probable good to come of such uterine manipulations. To this we simply say that the operator who is unwilling or unable to sufficiently sterilize his hand for obstetric operations is unfit to be trusted at the other end of an instrument of steel boil he it never so wisely!—Western Med. Review.

DIARRHEA.—Dr. J. N. Hurty, of Indianapolis, says that one cause of infantile summer diarrhea is the filth and ferments acquired by infants when crawling upon dirty floors. These find their way by soiled hands and otherwise into the mouths of the little ones. Recently in a family of young children, where bowel troubles were at the time prevalent, he saw an infant crawl across a spot which a few moments before had been soiled by its sick sister. The soiled place had been wiped with a wet cloth, but the child had diarrhea in a few hours. Among the preventative recommendations of the Indiana State Board of Health is one advising a clean sheet to be tacked upon the floor and the child not to be permitted to crawl off the same.

A Powder for Difficult Detention.—Dr. S. Santoire, of the borough of Brooklyn, sends us the following formula, and says that he has used it with great success for over twenty years in hospital and private practice:

Ŗ.	James' powder, calomel, each	r grain:
	Sodium bicarbonate	
	Dover's powder	
	Sugar of milk	12 "

M. Divide into twelve powders. To a child from six months to two years old a powder may be given every four or five hours, in syrup or in milk and water.—N. Y. Med. Journal.

DR. CHARLES CARTER died at Blowing Rock, N.C., September 9, 1898.

Review of Current Literature.

GYNECOLOGY AND ABDOMINAL SURGERY.

IN CHARGE OF

H. S. LOTT, M. D.,

J. W. Long, M. D.,

HUBERT A. ROYSTER, M. D.

SUPRAPUBIC OPERATIONS.

(Read before the Gynecological and Obstetrical Society of Baltimore, January 11, 1898. By Joseph Price.)

The suprapubic route in pelvic and abdominal surgery has never been wholly abandoned by operators of very large experience and with many surgical triumphs to their credit. There is something tempting in the novelty of every new and easy way to accomplish a difficult task, however short the way may come of reaching permanent and satisfactory results. This temptation is especially strong with mere surgicul adventurers who from commercial motives, the lowest order of motives, adopt surgery as a trade; with the beginners, who are making their trial trips in surgery with meagre equipment, a very small fund of experience to draw upon in those emergencies so repeatedly met with in abdominal surgery; and with those who have tried about all methods with discouraging success. The perfecting of a method which is only attained through repeated and thoughtful experience in its use, by a particular operaton, always gives him the best results when perfected. The ease and simplicity of the removal of the uterus by the vaginal route has encouraged many to practise it, simply because they dread the numerous complications found above and prefer the rapid and easy extirpation of the uterus, regardless of adjacent serious pathological conditions. There is too common use made of the term "bridge the patient over." Every man with the picture of his own work before him, who has studied the lessons of his own failures and successes and has observed the work of others, knows what this "bridging over" means. It is but guessing at possibilities, it is playing a game of chance with human life as the stake, it is trusting to Nature to do what they are afraid to do. If the patient is lost in the "bridging over," it is spoken of as "hopeless." There are more patients lost by tampering, this apprentice surgery, than were lost by the most radical operators in the pioneer days of abdominal surgery. A few weeks or months after the incomplete procedure, if the patient survives the mental and physical torture and the sequelæ of the bridging process, the patient goes into the hands of some one else with numerous sinuses about the groins, sacrum, and vaginal vault, with the pelvis charged with suppurating ovaries and tubes, the patient greatly

emaciated, septic kidneys, and other important organs damaged. If abdominal section follows the vaginal incision, we have, complicating the serious pathological conditions mentioned, the vaginal cicatrix with fixation of whatever has been incised or punctured, the enucleation of which will prolong the section and give additional hemorrhage and shock and favor a tedious convalescence—conditions not experienced in completed primary suprapubic sections, where we have the removal of everything diseased and the repair of everything damaged.

Tubal occlusion with retention of pus, blood, or water demands complete extirpation, with or without the uterus. The simple removal of the uterus is an easy operation, the removal of the uterus with diseased appendages is more complicated and difficult; but neither is complete until all adhesions above have been freed and the viscera repaired.

If you can dismiss everything above the uterus, if it is simply a matter of the removal of tubes and ovaries, and not of correcting the overlying complications, the vaginal route is the route to pursue. One puncture will relieve an abscess of the appendages, but it leaves some of the multiple abscesses untouched, and it is just in this class of cases, I hold, that work from below is prohibited, is bad surgery. All the cases with vaginal incisions and drainage remain ill patients. This fact condemns the procedure.

The vaginal procedure was primarily successful in my hands, and has remained successful as I have progressed in my work; yet nothing will shake my faith in the suprapubic method as the most complete in detail from beginning to end. I have found that the vaginal operations in no particular compare with the upper method in the completion of work. I use the word completion in its broader significance. I mean an operation which does not begin with an explanation or apology about "properly selected" or "hopeless" cases. I mean cases which are from the pathological, diagnostic, and surgical points of view completed. In one day I operated on two cases of appendicitis. In one case I found the appendix strongly adherent to the sigmoid, in the other squeezed beneath the uterus. In these cases vaginal operation would have been dangerous and incomplete, and would have left pathological lesions antedating the operation, not corrected, and dangerous post-operative sequelæ.

The completion of the bowel toilet and the repair of large and small bowel, freeing all adhesions, are more important than the removal of a simple suppurating tube or ovary, and the patients are not relieved or eured if lesions of the bowel are neglected or adhesions passed by overlooked. By the lower route of operating the infection begins at the anus and the dirty surgery begins there; the lower method is dirty from beginning to end. The tearing and opening of broad ligaments is opening up sources of infection wholly avoidable by the upper method, and the removal of suppurative forms of disease from below favors fresh infection by incisions in the midst of filth. The opening up of lateral lymph spaces favors sepsis, and sepsis follows in many of these cases.

Where the vaginal method is resorted to there is not the same freedom from complications, the pulse is not so regular, the skin is not so cool as in the suprapubic method, and the post-operative sequelæ are more difficult and dangerous to deal with successfully. While this method may afford temporary relief, a more radical operation will be required later on. A great many cases where the vagina is incised and drained are placed on record as cures. They are not cures. There is only the temporary, deceptive relief of incomplete operation. If you incise a right iliac abscess and a left pus tube, leaving the right ovarian abscess and right pus tube, you leave half of the pus behind. You have only half-drained. There will be an old necrotic sac in the deep pelvis, and it should not be left. In from one to fifteen years later the woman has a sinus or sinuses in the sacrum or groin, and then it is a hopeless case. Some of these patients are subsequently treated for sepsis or typhoid fever. Secondary operations have been quite numerous of late as the result of incomplete vaginal work. Surgeons throughout the country are dismissing as hopeless a class of cases some one must care for. If a surgeon is afraid to open the abdomen for the purpose of enucleating huge pus tubes and ovarian abscesses, and repairing lesions of the sigmoid, freeing many inches of ileum and repairing it if necessary, he should adopt the vaginal route or send all such cases to a man with thirty-three vertebræ.

Extirpation of the uterus by the vaginal method, as I have said, is one of the easiest operations in surgery. It has been admitted by some of our surgeons that they have adopted the method because of its ease. Doubtless the surgeon does his best work along lines he can work the most easily. Removal of the uterus by the vaginal route avoids the complications so frequently found above, and which leave the patients ill and with constantly threatening and dangerous sequelæ.

Operations by the suprapubic route open the field for the correction of all the concealed mischief and complications which are walled off from the vaginal route. The aim and effort should always be to bring the patient into as normal a condition as possible and make very improbable the necessity for a repeated operation. All adhesions should be broken up. These may be to the solid structures, to large and small intestines, may implicate important pelvic vessels. With experienced surgeons there is not much disposition or reason for debating the chances of surviving the operation. Complete work offers the best chance for complete recovery in about all cases. We claim that work by the vaginal route is rarely, if ever, complete; that it is dangerous; that it is working in the dark; and that the steps of it cannot be seen. It is absured to speak of incomplete work giving satisfactory results. I know from long experience with the very worst forms of pelvic disease that suprapubic work is complicated in many cases, and that nothing short of painstaking, good surgery will save life and completely correct the conditions.

It is not a fact that nearly all, or even the majority, of successful

operators approve the vaginal procedure, unless a very new significance be given to the term successful. The large number of accidents and post-operative lesions of pelvic viscera recorded by operators who have reported quite fully their incomplete work is shocking, showing, as it does, from one to nine per cent of injuries to the ureters and two to six per cent bowel injuries. By the suprapubic route all injuries can be repaired at once. About every section done for advanced forms of pelvic disease, tubal and ovarian suppurations, inflamed dermoids, suppurating ectopic sacs, illustrates the value of the suprapubic route for the completion of work. In the suppurative forms of tubal disease on the right side we find the appendix involved in about six or eight per cent of every series of cases. In this group of cases we commonly find omentum, ileum, appendix, and bladder involved, all requiring some attention. On the left side we find suppurative forms of disease commonly involving the sigmoid, and also disorganized points to repair. It is the removal of growths, puriform accumulations, worthless organs, the repair of damaged viscera, well-placed drains, proper toilet, and the putting of all organs in normal ralations that constitute the important steps in our procedures. Many of the old operators who have abandoned the suprapubic route for the vaginal have not improved their records—their old record is incomparably better than their new. A woman may change her bonnet four times in a year to suit the seasons, but her gynecological adviser should not change his methods with every change of the moon. H. S. L.

GENERAL SURGERY.

IN CHARGE OF

H. T. BAHNSON, M. D., R. L. GIBBON, M. D.,
J. HOWELL WAY, M. D.

The Surgery of Plain Suppuration—(Chas. J. Cullingworth, M. D.—Brit. Med. Jour.—Med Review.)—After outlining in a more positive manner the indications for operative interference in pelvic cellutis, the author portrays the uncertainty still existing with regard to a definite knowledge of the exact operative indications in pelvic peritonitis in the following sentences: "It would of course be easy to enumerate the conditions necessitating operative interference, if one could deal with them from the point of view of the pathologist. But the exact knowledge of the pathologist is acquired after the parts have been exposed or removed in the operative theater or the post mortem room. Diagnosis at the bedside is at best a matter of inference. In much of the criticism that has been expended on the operative treatment of pelvic inflammation this fact has been lost sight of. It is so easy to be wise after an event, so easy to say, with the parts lying before us, this patient ought to have been operated upon, as the case may be. If those who are so

ready with their cheap and easy criticism had been brought face to face with the clinical problems presented by the cases during life or before operation, they would often have had to acknowledge in the words of our great Master, that 'judgment is difficult and opportunity fleeting.' The indications that I am about to formulate may possibly be found to have a disappointing vagueness, a lack of pathological percision. Vague as they are. however, I trust that they will prove not altogether useless." These words of the author are a most fitting illustration of the difficulty of deciding in a given case with regard to the proper therapeutic procedure, and, coming from an experienced gynecologist and authority, carry with them a corresponding weight. In the beginning of his paper the author lays down the generally accepted rule that all purulent pelvic inflammations must be treated like pus collections in any other part of the body, by letting out the pus. But it is not always possible to say whether suppuration exists or not. The temperature is not a safe guide, as there may be a considerable rise in temperature in simple or catarrhal salpingitis during the acute stage, or there may be considerable collections of pus without a rise of the temperature above the normal. The subject is a vast one and individualization is necessary. In a general way the author's views are that, as a rule, operative interference should be postponed in acute cases, as the percentage of recoveries in cases operated in the acute stage is very small. Only where dangerous sepsis exists, it may be necessary to operate in the acute stage to save the life of the patient. Where, after the acute stage is passed, there is a tendency toward recovery upon rest in bed and the local application of warmth, operative interference is superfluous. Where such tendency toward recovery is not manifested, but where there is an increase in the size of the inflammatory tumefaction, pus is present and the indication for surgical intervention is clear. If during an attack of acute inflammation of the uterine appendages, a tense, glodular, cystic swelling be formed in the pouch of Douglas; bulging downwards into the vagina and backwards into the rectum, surgical interference is imperative. Recurrent attacks of pelvic peritonitis in a patient who has had an acute salpingitis and in whom there has remained quiescent but obvious swelling in the posterior part of the pelvis suggests a collection of pus and the need of operation. The pus in such cases is usually shut up either in the tube or in the ovary. Cases in which with a more or less definite history of pelvic inflammation and the presence of a localized swelling above the vaginal roof there are symptoms of general septic infection, must be operated immediately. In the author's experience, such cases have most frequently proved to be of the nature of what is termed tubo-ovarian abscess. As a rule, cases of salpingitis, unattended by an appreciable amount of suppuration, tend, under the influence of time and rest, to spontaneous recovery. The author considers it perfectly legitimate, however, to operate upon women belonging to the laboring class who suffer from chronic non suppurating salpingitis and can not afford the time necessary for recovery by rest, provided, the alternatives having been frankly explained to them, they decide in favor of operation.

The author dwelled at some length upon the undoubtedly important fact that the mortality of operations performed during an acute peritonitis is found

greatly to exceed that of operations performed where the acute symptoms have been allowed to subside. He quoted from the highly instructive paper on appendicitis of Mr. Clutton which shows that out of twenty-one patients upon whom Mr. Clutton found himself compelled to operate without waiting for the acute symptoms of peritonitis to subside, six died; while of twenty-seven cases in which he operated for the removal of a diseased appendix, after the subsidence of acute symptoms, he only lost one. The author called attention to the marvelous tolerance of the peritoneum after an attack of acute pelvic peritonitis, saying that it would bear with impunity the most prolonged and severe manipulations, and would often take no notice of even extensive contamination with pus and other morbid material. He most naturally attributes this increase in the resisting power of the peritoneum after exposure to a sudden infection to a certain degree of temporary immunity brought about by the acute infective process which has just subsided. He also called attention to recent animal experiments which serve to strengthen this view, and to the suggestion of Durham to administer an intra-peritoneal injection of antistreptococcus serum the day before undertaking an intra-peritoneal operation upon a case in which abscess is suspected.

The author dismissed the subject of pelvic cellulitis with a few sentences motivating the brevity of his remarks by the fact that "there is a close agreement amongst gynecologists as to the surgical treatment of this affection." In suppurative pelvic cellulitis the operation should always be performed without opening the peritoneal cavity. The abscess in the majority of cases points above Poupart's ligament, indicating the proper site for incision. In cases where the suppuration occurs in the retro-peritoneal tissue, the existence of an abscess is often a mere matter of inference. The desirability of an operation is here not so universally acknowledged; the incision is identical with that required for tying the external iliac artery, followed by careful dissection beneath the uplifted peritoneum. More rare situations of pus collections are between the bladder and cervix uteri and behind the posterior wall of the vagina generally on one side. In these cases the abscess must be opened of course from the vagina. The author doubts the occurrence of cellulitic abscess between the layers of the broad ligament at its upper part. He believes that most of the reported cases of this kind were cases of pyosalpinx or suppurating ovary in which the broad ligament appeared to be drawn over the inflamed organs in the form of a hood concealing them from view when the abdomen was opened.

THE TREATMENT OF ACUTE GENERAL PERITORITIS ORIGINATING IN THE VERMIFORM APPENDIX.—Deanesly (British Medical Journal, Am. Jour. Med. Sci.) terms those cases general peritonitis where pus or septic fluid is found in the pelvic pouch, in both flanks, and among the small intestines as high as the navel, and when the inflammation is nowhere limited by firm adhesions. These cases demand immediate interference by operation to save the patient.

The author distinguishes three varieties occording to their mode of origin:
(1) The acute fulminating variety. There is an acute septic invasion spreading with such rapidity that the greater part of the peritoneum is involved in twenty-four or thirty-six hours, and in which the virulence of the

miero-organism is so great, or the resistance of the tissues so feeble, that the inflammation is not limited by the formation of durable adhesions among the surrounding intestines. (2) This variety follows the bursting of a localized abscess around the appendix by some mechanical cause, such as a blow or strain. (3) In this variety the onset is less acute and the early symptoms less severe. In fact, clinically, it appears to be an ordinary case of what used to be called typhlitis. There is little pain, moderate fever, a tender swelling in the right iliac region, and constipation, but no vomiting after the first day; but the swelling, instead of gradually disappearing, or coming to the surface in the form of a localized abscess, becomes lost in increasing general distention, which begins in the lower part of the abdomen and spreads upward.

In the treatment of these cases the author believes that strict antisepsis is as essential as if no pus was present, as a mixed infection increases the danger. He employs the median incision in order to reach readily all parts of the abdomen, using a second incision over the appendix if it is found necessary. In ligating the appendix he forms a peritoneal cuff, ligates close to the cæcum, and then ligates the cuff over this, tying off the mesentery separately.

The removal of the appendix he considers to be an essential part of the treatment of cases of general peritonitis. In case of localized abscess it is generally held, and he believes rightly, to be unwise to disturb adhesions more than necessary, for fear of generalizing the infection. For the same reason, it is not adviseble to prolong the search for the appendix after opening and draining a localized abscess, and it is certain that leaving it in such cases is no bar to recovery. In general peritonitis, on the other hand, the only chances of averting a fatal result is the removal of the focus of infection and as much of the toxic products as possible. In other words, the appendix must be removed and all intestinal adhesions thoroughly separated in order to liberate and remove the collections of pus and lymph among the coils.

The abdomen he cleanses in all cases by means of sponges on holders, without the use of irrigation, which he has discarded.

Motes and Items.

A Loss to the Pepper Laboratory.—By a recent codicil to the will of the late Dr. Pepper, a bequest of \$75,000, as an endowment of the William Pepper Laboratory, of the University of Pennsylvania, was revoked, and the amount given to the department of archeology of the same university, for the purposes of the university museum.

DR. RUSH S. HUIDEKOPER, professor at the New York College of Vetrinary Surgeons, the author of some excellent veterinary

manuals, lieutenant-colonel of volunteers, formerly medical director of the camp at Chickamauga, and more recently surgeon-in-chief of the American army in Porto Rico, has been relieved from duty and ordered to report to the surgeon-general. It would be interesting to know how a man—who is, it is true, a graduate of a medical college, but whose practice has been confined, of late years at least, to dogs and horses—came to be appointed to the medical corps of the United States army, and placed in authority over medical practitioners, both civil and military, of long experience and wide reputation.—Med. Rec.

THE ETIOLOGIC RELATION OF THE BACILLUS ICTEROIDES TO YELLOW FEVER.—The discussion on this subject continues with unabated vigor. There seems to have been a disposition of late on the part of some of the northern bacteriologists to discredit Sanarelli's work and conclusions, but the argument used to sustain their views are not invariably convincing. Thus, a recent writer upon the subject has urged that Koch's first law is not fulfilled, because Sanarelli did not find the microorganism in all of the cases he examined, notwithstanding the fact that he manifestly did not and perhaps does not even know the best method of searching for it. This does not necessarily discredit it as a cause, for in so common a disease as typhoid fever it is frequently difficult to isolate the bacillus of Eberth. author, moreover, has exposed cultures of the bacillus icteroides to low temperatures, even below zero, and found its growth was inhibited, but its vitality not destroyed. He argues that this bacillus manifestly cannot be the cause of yellow tever, because, as is well known, epidemics of yellow fever cease after a frost, and he believes the cessation must be due to the destruction of the bacillus. The annals of the U. S. Navy contain many instances of ships infected with yellow fever, that have been sent to northern latitudes and presumably exposed to a temperature that in our author's opinion should be sufficient to destroy the germs. Nevertheless, the disease reappeared as soon as the ships returned to the tropics. In an instance related to use by a naval surgeon, a ship infected in the Pacific ports of Central America was taken to Alaska, the crew sent ashore, the ship thoroughly wet within and without, and allowed to remain frozen all winter. Yellow fever reappeared as soon as that ship went

south, and eventually it was necessary to burn it. Evidently in this case some bacilli escaped destruction by cold.—Philadelphia Medical Journal.

GENERAL WOOD'S SANITARY WORK .- The city of Santiago, long known as a breeder of pestilence and one of the dirtiest and most unhealthy places in dirty and unhealthy Cuba, has been in American hands only about two months, and is now in a condition of cleanliness that New York might almost have envied a few years ago. Under the system introduced by General Wood, who, it may be remembered, is a physician, Santiago is divided into five sections, each one under the general supervision of a medical man, who has under him inspectors of sewers, streets, houses, and dispensaries, and a number of street cleaners. Five hundred cubic yards of refuse are burned daily, disinfectants are distributed wherever they are needed, and a heavy fine is imposed for uncleanliness or for any failure to report unhealthful conditions and deaths. The results are shown in a decrease in the death-rate within a month from an average of seventy to twenty a day. Among the troops the principal diseases are typhoid, malarial, and yellow fevers, and dysentery. The cases of yellow fever, several of which have been among the socalled immunes, are few in number and the disease is of a very mild type. The mortality from malaria or dysentery is much greater than that from yellow fever. Now that the Spanish troops have all left for Spain, it is hoped that yellow tever can be made still less dangerous through the continuance of Dr. Leonard Wood's good work. - Medical Record.

HUMANITY OF A SPANISH SURGEON.—During the infantry skirmish following an attack on the leading party from the Gloucester at Guanica, Porto Rico, one of the volunteer soldiers, outrunning his comrades, advanced far ahead of his line. When he had nearly reached the Spanish position, he was overcome by the heat and fell in a semiconscious state. A Spanish doctor and two hospital corps men rushed to his aid with a stretcher, administered the necessary restoratives, and had him conveyed at once within the American lines.—Medical Record.

DR. GEORGEW. LINDHEIM, assistant surgeon of the eighth New York volunteer regiment, died at his home in this city, on Sep

tember 16th, of typhoid fever. He was 27 years old, and was a graduate of the College of Physicians and Surgeons of this city. He recently returned to New York in charge of a hospital train bringing sick members of the eighth regiment from Chickamauga. While passing through Cleveland he was pestered by some newspaper reporters and physicians, who insisted upon his sending to a hospital there so ne of his sickest charges. They said the men would not live long enough to reach New York and threatened to "roast" Dr. Lindheim if he did not yield to He said he had been instructed to bring the their demands. men to New York and intended to do so. They all arrived alive and none, except Dr. Lindheim himself, has yet died. He was taken ill two days after the arrival here, and in his delirium was constantly rehearsing the criticism to which he had been subjected from reporters in Cleveland and elsewhere along the route, and also from some of his own men who complained that he was starving them because he would not allow the convalescents from typhoid fever to eat themselves into a relapse. - Med. Rec.

THE VACCINATION BILL.—However convinced we may be as to the advisability of vaccination being compulsory, we think that the House of Lords did the best thing possible under the circumstances when they retreated from their original position, and included the socalled Conscience Clause in the Vaccination As long as the power to prosecute lies in the hands of Boards of Guardians, it will be impossible to make vaccination compulsory, seeing that the Local Government Board has not the power to compel the Local Authority to prosecute. We think, taking everything into consideration, that it will ultimately be better for the advocates of vaccination that this Conscience Clause was inserted, seeing that it will silence the noisy and presistent opponents-who can at all times command supporters when they dangle "compulsion" before their eyes. The Bill itself touches one class of people in particular, viz., those who were indifferent to vaccination, and did not object to it, but who would not go out of their way to get it done. the present Act, vaccination will be made much easier for these people, as the vaccinating Medical Officer will call at their houses and save them any unnecessary trouble. One of the unsatisfactory parts of the Bill is that it does not provide for re-vacc:

nation, and we feel confident that some further and more thorough legislation must be introduced before this vexed question is finally and satisfactorily settled.—The Therapist.

TRAUMA AS A CAUSE OF APPENDICITIS. - Dr. W. M. Brown, in the Medical Record, September 24, 1898, in discussing trauma as a cause of appendicitis, says that while in many cases an attack may be stirred up by an injury, he thinks this happens nearly always in patients who have had a previous attack. many cases in which the patients had denied having had any previous trouble he had found such adhesions and general thickening as to make him believe otherwise. These adherent masses are very prone to inflammation and it is easy to see how in such cases an acute attack may be lighted up by a trauma. He says that in his fresh cases he has rarely failed to get a history of indigestion and diarrhea some short time before the attack of local pain, and he believes that most cases of appendicitis have their birth in the filling up of the appendix with liquid and septic fecal matter from which the fluid portion is afterward absorbed, leaving behind the irritating mass, which continues the inflammation. Such a magazine may be kept sealed for a while, but how certain it is to explode in time, and what will more surely set it off than a trauma of some kind?

YELLOW FEVER CONDITION.—The Press reports for October 3rd, state that the Surgeon General's latest reports show in New Orleans to date twelve cases of yellow fever and two deaths. The local corps of physicians has been supplemented with an unusually large number of Federal surgeons, and there seems to be no fear but that the disease will be held pretty well in check. Reports show that the disease has appeared in mild form at Harristown, Miss.

WINTER CAMPS IN THE SOUTH.—The Secretary of War has selected three points in South Carolina and seven in Georgia as winter camps for the Army, and has announced that in future all troops for Porto Rico will be embarked at Savannah. The various sites selected as camps have been visited and inspected by a board of experienced army officers. The tents will be joined

in groups of three, two sleeping rooms and a sitting room and each of these groups will be provided with a stove.

THE DOCTORS OF SWEDEN never send bills to their patients. If you have occasion to call a physician you will find him not only skilful in his profession, but a highly educated and honorable gentleman. You will also have a proof of the honesty of the Swedes and their friendly confidence in each other. What you shall pay your physician is left entirely to your own choice. The rich may pay him liberally, whether they need his services or not, if he has once been retained by them. The poor may pay him a small sum, and the very poor pay him nothing. visits the poor as faithfully as he does the rich. A similar custom prevailed up to the middle of the present century in some of the most remote portions of the Highlads of Scotland. There the doctor collected his entire year's bills on a certain market day in summer, getting perhaps five or ten pounds from the larger farmers, but only as many shillings from the poorer crosters.— Medical Age.

DR. I. N. Love, in reply to a toast, "The Babies," at a recent banquet in St. Louis, closed an eloquent speech with the sentiment: "Then here's to us all, babies as we are. Yes, we come into this world, puling, puking infants, naked and bare; we go through the world, puling, puking infants, each with his own share of sorrow, trouble and care. We go out of the world, puling, whimpering, helpless infants, faint, feeble, tottering, God in His infinite omnipotent wisdom only knows where; but all along the road, if we are thoroughbreds here, we shall be thoroughbreds in that Eternal future towards which we are all speeding with irresistible force."—Medical Times.

Mr. Herbert Spencer has been credited with vegetarian principles. An enthusiastic devotee of the vegetarian school, meeting the philosopher a short time ago, asked him if he still adhered to that system of diet. "I was a vegetarian for one year," Mr. Spencer replied, "but at the end of that time I went over all that I had written during the year and consigned it in toto to the fire."—Medical Times.

THE WELSBACH BURNER.—The chemicals constituting the incandescent mantle of the Welsbach gas burner are principally the oxides of zriconium, thorium and yttrium. The mantle is made by first impregnating a woven fabric with a chemical compound containing salts of the above metals. In lighting the first time, the fibrous substance is consumed, leaving behind the fragile cone of the above oxides, which when heated to intense whiteness by the gas flame underneath, shines with great brilliancy.—Medical Times.

MATERNAL IMPRESSIONS AGAIN.—The Japanese are ruthless in their tampering with nature. If they decide that they want a bird or animal of a certain shape or color, they set about manufacturing the article, so to speak, by the exercise of exceedingly clever ingenuity and untiring patience. Here, for example, is how the white sparrows are produced: They select a pair of grayish birds and keep them in a white cage in a white room, where they are attended by a person dressed in white. The mental effect on a series of generations of birds results in completely white birds.—Medical Times.

Reading Motices.

ACUTE INFLAMMATION OF THE PROSTATE GLAND. — The Journal of the American Medical Association, for August 20th, contains a report on inflammation of the prostate gland, which was presented to The Section on Surgery and Anatomy at the Fortyninth Annual Meeting of the American Medical Association. held at Denver, Colo., June 7-10, 1898, by Liston Homer Montgomery, M. D., of Chicago, Ill. His plan of treatment in acute inflammation of the prostate gland is to wash out the abscess cavity with hydrogen peroxid, give copious hot water enema and hot hip baths frequently, avoid morphine internally and advise care lest the patient strain at stool or during micturition. On the theory that toxins are retained in the circulation and within the gland, and to prevent degeneration in the gland substance, he administers triticum repens or fluid extract tritipalm freely, combined with gum arabic or flaxseed infusion. Along with these remedies the mineral waters, particularly vichy with citrate of potash, go well together. Hydrate of chloral or this salt combined with antikamnia are the very best anodyne remedies to control pain and spasms of the neck of the bladder. These

pharmacologic or medical remedies are the most logical to use in his judgment, while externally, applications of an inunction of 10 or 20 per cent iodoform, lanoline, as well as of mercury, are also of value.

SANMETTO RELIEVES QUICKLY IN PROSTATIC TROUBLES.—To say that Sanmetto does all that could be reasonably expected of it, in all troubles of the genito-urinary organs, is not an adequate description of its therapeutic value. For it aids in any congestion more or less, and is therefore an invaluable remedy for all congestions, especially of the prostate gland, affording relief quickly.—H. A. Gross, M. D., Drake, Mo., 1858-Med. Dept. Washington Univ. (St. Louis Med. Col.) St. Louis, Mo.

A highly efficient combination for the treatment of feebleness and loss of weight dependent on exhausting chronic diseases, and retarding convalescence, will be found in Gray's Glycerinc Tonic Comp., Formula Dr. John P. Gray. In the loss of flesh caused by too rapid growth in youth, the waning nutrition of advancing age, and often in tuberculous cases, good results may be depended upon. Weakly children soon show its beneficial effects, and for debilitated women it is unsurpassed. The Perdue Frederick Co., No. 15 Murry Street, New York.

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Original Communications.

THE QUESTION OF OPERATIVE INTERFERENCE IN RECENT SIMPLE FRACTURES OF THE PATELLA.*

By Dr. Charles A. Powers, Denver, Colo.

THE author referred to the writings of Dennis, Bull, Czerny and Myles, then commented upon the two most important tests, the structural and the functional, for these fractures. As to the mechanism he believed that the majority of these fractures were due to muscular action in the patient endeavoring to save himself from falling, strongly contracting the quadriceps femoris at the time. He showed in treating of the question of pathology, that there are but two fragments in the fracture due to muscular action, the upper one being generally the larger, the fractured surfaces as a rule irregular and the line of fracture transverse or olique. The author enumerated the conditions tending to cause imperfect union and the obstacles to union as follows:

- 1. Separation of the fragments, due to a. Retraction of the upper fragment from contraction of the quadriceps femoris and a slight drawing down of the lower fragment through a shortening of the ligamentum patellæ. b. Effused blood.
- 2. Tilting of the fragments (this may be present to a marked degree and unrecognizable without operation.)
- 3. Rupture of the tendinus expansion of the vasti and of the lateral portions of the capsule of the joint.

^{*}Abstract of paper read before the American Surgical Asso. 1898.

- 4. Prolapse of pre-patellar tissues into the breach.
- 5. Atrophy of the quadraceps femoris due to a. Disuse. b. Arthritis. c. Marked contusion of the muscle. d. Blood extravasated from the joint through the rent in the upper part of the capsule.
 - 6. Arthritis of the knee joint, this possibly resulting in
- 7. Adhesions of the patella. Further, though, of little value, may be added.
- 8. Natural poverty of the blood supplied to the bone (rendered negative by the fact that the vertical fractures healed satisfactorily) and
- 9. Exceptional tendency to osteitis, seen in fat people, in the aged and in certain conditions of the blood.

The speaker considered that as to the non operative management of fractured patella by mechanical means no better evidence of the unsatisfactory results need be adduced than the large number of devices and plans which have been resorted to from time to time. Some of the devices were spoken of, among others the so called "Dutch" method of massage, Malgaigne's hooks and the use of properly applied bandages or strips of plaster followed by a plaster of Paris dressing or a splint.

He quoted the opinion of many prominent surgeons as to the treatment of this fracture, and gave the results of various kinds of treatment and the comparative mortalities in elaborate statistics.

The author then spoke fully of the subject under the titles of (1) Limitations attending the operation; selection of cases. (2) Operative procedures; (3) Time of operation; (4) Immediate and remote results with those attained without operation; and (5) Dangers.

Dr. J. D. Bryant, of New York, in discussing Dr. Powers paper referred to work of the late Prof. Hamilton on this subject and called attention to the importance of (1) the degree of physical infliction, (2) the duration of confinement in bed as bearing respectively on the comfort, health and business demands of the patient, (3) the character and importance of the inherent and acquired complications of respective methods of action, and (4) the final burdens imposed by the sequelæ of different plans of treatment. He was not inclined to suturing patella but thought it justifiable in selected cases.

At present the technique of preparations which he employs consists (1) in making a short vertical incision, (2) removing the blood clots from the fractured borders with the interposed fibrous tissue that is sometimes present and cleansing the joint cavity, (3) draining the joint with a few strands of silk-worm gut at the outer side, (4) uniting the fracture with a small wire so placed as to cause retention, and proper apposition of the fragments, and (5) closure of the wound, antiseptic dressing and fixation in bed for two weeks followed by plaster of Paris spica and out of bed on crutches.

He called attention to a mechanical treatment he had followed during the last twenty years, for which he claimed (1) greater comfort and efficiency, (2) less danger and only a week's confinement to bed and (3) results equal to the best of the other mechanical methods, and showed drawings of this method.

Dr. M. H. Richardson, of Boston said: There are points in the paper which affect every practitioner. Recently one of the most successful general practitioners in my community was criticised because he did not wire the patella, and in this particular case the criticism was unjust.

The first remark that I wish to make is to be considered in reference to those cases which are to be treated in good surroundings, patients in good health, by a surgeon of experience in the technique of the operation and with the technique of asepsis. If we are to consider the treatment of the patella in general among those whose experience is limited I think we must take the position that a fracture should not be wired under any circumstances. I am sorry that the reader had to omit reading some of his paper and particularly that part in reference to the anatomical and pathological conditions for I think the question of separation of the fragment is most important.

You are all doubtless familiar with the fact that if the patella alone is cut there is little if any loss of power of extension. I have shown this in my demonstrations on applied anatomy by extending the foot with the subject lying on his back with the leg over the table and then employing traction on the quadriceps, Complete section of the quadriceps will be shown by a sinking of the patella. If we can get complete control of extension in cases in which the fracture is limited to the patella

there is no need of opening the joint, but, if we have so extensive a laceration that we have no control of extension then it seems to me that the advisability of wiring is to be seriously considered. The time of confinement in ordinary cases of fracture of the patella should be six months. It has been shown in the ordinary non-operative methods of the treatment of fracture of the patella that they recur if the patient walks in six months. I should say that we are no longer to be influenced by the bad results which follow the too early use of the limb. The results in non-operative cases with extensive separation are extremely good. I have seen a sea captain who had extensive comminution of the patella and who can now walk perfectly well although the accident occurred three months before he got into port.

It is not necessary to repeat the good results which have followed bad cases, for we have all seen them. The question is whether we can predict a bad result,

As to the separation of the fragments, at the Massachusetts Hospital between 1888 and 1898 the records show that there were 128 cases of fracture of the patella treated there, of which 113 were simple fractures. Of this 113, fifteen were wired, and of the wired cases two suppurated. I think one of the wired cases was my own as I know in one of them there was a wide This means to say that in fifteen cases of simple separation. fracture infection only occurred in two. I am convinced from my own experience that no wounds can be assuredly aseptic. for I believe that all cases are infected and especially wounds that are opened for any length of time. The so-called aseptic healing is because the infection is not successful and in my experience a wound of the knee joint is especially liable to infection so that it is hard to prevent serious results. I consider therefore that this operation of opening the knee joint is a very serious one and may be followed by the loss of the limb or death. have opened the joint for foreign bodies but have never felt the security that I should feel in an amputation or a removal of the breast. Perhaps the knee joint is not infected any more than other parts of the body but it is less able to withstand the attacks of micro-organisms and we must therefore consider interference with more deliberation.

The best time to wire the patella is when we have demonstrated the failure of conservative methods and we should watch for the absorption of effused blood. It seems clear that effused blood is the best field for infection and, as has been shown by Halsted, the most aseptic operations are those which are bloodless. We should wait a certain length of time to know just how bad the result is to be before going into the joint.

Dr. James F. Moore, Minneapolis, said: I believe this paper represents the opinion of American surgeons today, that is, of those who are conservative, and by conservatism I do not mean I think Dr. Powers' perthat we shall refrain from operations. sonally collected opinions from a good index in a certain way and they come from surgeons who have ample hospital facilities at their command. They report favorably on the operation but they do not advocate it as a universal practice and very few say that they always perform open arthrectomy. The argument therefore is in favor of a good surgeon with proper surroundings. The mortality in selected cases is less than one per cent. which is as small as you can get from any operation. There is only three per cent. of unsatisfactory results, which is infinitely better than the best results reported by treating fracture of the patella by non operative means. It is of interest to notice that in reported cases operations have increased in number within the past few years and that the increase is in the hands of men who have done the most work in this line. Men who have operated upon these cases under favorable circumstance have been well pleased with the results, and it would be of interest to know why those who are opposed to operative interference take that stand. I know an eminent surgeon who is opposed to operative treatment under any circumstances, and happen to know that his experience is one case in which the man died of septic arthritis. This is an unfair conclusion.

I agree with the author of the paper and with the most of those who have written and spoken upon this subject that the operation of open arthrotomy is more dangerous than a simple laparotomy as the lymphatic system cannot be compared with that of the peritoneum. The peritoneum is able to take care of infections while the knee joint cannot do so, and Dr. Powers' conclusions are therefore justifiable, that open arthrotomy with the proper environment is proper. I do not be-

lieve, however, that this should be accepted as a general practice as every tyro will be making open arthrotomies and the grave yards will be filled by men who have had simple fractures of the patella. A man in general practice who is not sure of his asepsis has no right to open the knee joint, but if we do operate upon the knee joint open arthrotomy is the only thing to be considered as any other method savors of homoepathic surgery. Dr. Powers' results show that there is less than one per cent. of mortality which is practically nothing and there is no question which will give better results.

Dr. Powers does not commit himself as to time operation should be performed, but Dr. Richardson touches upon this point. I must differ from him as I do not see why be should prefer late operation as we can be just as successful by operating immediately. The trouble often is to approximate the fragments, and we have to cut right and left in order to do this. We have to stir things up about as badly as they were stirred at the time of the fracture, and I do not see therefore what can be gained by waiting, so that I advocate immediate operation.

One point in the technique. I do not advocate drainage of wounds in general but I am in favor of the principle that when you are in doubt as to whether you should drain, do not do it. In open arthrotomy I think you should drain because if you open a large joint there will be an excessive amount of discharge which will cause a mechanical distension and interference with circulation. I think therefore that you would get the best results by temporary drainage. I have had some experience in making a cutting operation for congenital dislocation of the hip and have been driven to drainage sometimes in those cases.

A point of considerable interest is recurrence after operative procedures, and on this we have little information at present, but it is a good point upon which to make notes in the future. Should patients who have been subjected to open arthrotomy expect a recurrence? I believe not.

One point made by Dr. Richardson is interesting, i. e., that the amount of separation is an index as to what should be done. All of us who have treated these cases know that the amount of seperation is not a sure index of the amount of usefulness of the 1 imb. In one of my best cases there is a separation of four inches and yet the man walks better than patients with only two inches separation.

Dr. W. S. Halsted, of Baltimore, said: I will confine myself to one of the most important points, and that is drainage. We do not drain the knee joint in order to get rid of micro-organisms. If the tissues are in such shape that they can take care of the micro-organisms they will do better than they would if hampered by drainage. I think one who operates should wear gloves and use strictest precaution.

In closing the discussion Dr. Powers said he thought if a surgeon felt competent to undertake this operation he should feel safe in dispensing with drainage.

UTERINE FIBROID.*

By J. GARLAND SHERRILL, M. D., Lecturer on Surgery in the Hospital College of Medicine, etc., Louisville, Kentucky.

HAVE here a tumor which was removed September 14th, from a lady aged forty-four years who came to see me on August 27th. Her family physician had made an examination some time previously and made the diagnosis of "abdominal tumor." She had been suffering for two years from some remote abdominal trouble, but had not been examined until two months before I saw her.

An examination when she came to see me revealed an abdomen considerably enlarged, the umbilicus was about level with the abdominal wall, there was a tendency to hernia at that point, but the umbilicus did not protude much if any beyond the surrounding skin. Further inspection revealed a growth of some kind within the abdomen. Examination per vaginam revealed an os uteri very high up; I could just reach it with the tip of my index finger, and it was situated far to the left side. On the right side, through the vagina, I could detect a large hard lump, and in the abdomen above the tumor extended a little further than the umbilicus. I was unable to determine the connection between the growth and the uterus, and the diagnosis rested

^{*}Reported to the Louisville Surgical Society.

between a tumor of the ovary and an intraligamentous fibroid tumor.

Ar operation was performed with the assistance of doctor James B. Bullitt; a very large incision was made; we found that the broad ligament was lifted up nearly to a level with the umbilicus if not above that point; the caput coli and the appendix had been also lifted up with the omentum which was extensively adherent over the mass; the bladder was pushed forward and upward, and I made an incision across the front separating the bladder from the tumor, tearing into the bladder as I did so probably half an inch; I then dissected down one side separating the omental adhesions, and dissected down upon the other side. The fundus of the uterus appeared to be normal. A peculiar feature of the case was the position of the right ureter. In dissecting on the right side we found the ureter had dipped under the lower lobe of the tumor and was considerably out of its normal position. We made a complete dissection of the ureter and isolated it before tying the artery on that side. Having ligated upon both sides the tumor was brought out of the cavity; a noeud was thrown around the pedicle and the operation completed in that way. The operation was rather tedious because of the careful dissection necessary to free the tumor from its attachments without injury to the ureter which was included in the growth. The tumor seems to have grown entirely out of the side and front of the uterus, the fundus not being involved. The rent in the bladder was sutured with three layers of silk, and the abdominal wound closed except at one point where a strip of gauze was inserted to take care of any oozing that might occur. The gauze was removed the following day. The patient voided her urine from the first without trouble; her temperature rose to 102 F. on the third day after the operation, quickly falling to normal after the use of purgatives, and she has returned to her home perfectly well. The only part of the wound which granulated was at the site of the stump.

Dr. James B. Bullitt: I was present and assisted Dr. Sherill in the operation to which he has referred, and he is to be congratulated upon his success in removing such a large tumor. The relation which the ureter bore to this lobulated mass in the pelvis was singular. A complete dissection was made, the ureter had to be dissected away from the lobule before the

tumor could be removed from its attachment in front. It is a beautiful illustration of what a tremendous growth may occur for a small beginning. The fundus of the uterus itself was free from any involvement. The case turther illustrates a fact which has been insisted upon by some very eminent operators, viz: that the normal operation is a safer method in cases of this kind than total extirpation. It requies more time to do a total extirpation, and there is also more shock from the operation.

Dr. J. G. Sherrill: I had fully intended to do a total extirpation in this case but even with the method employed the time of the operation was about two hours. The patient went off the table with a pulse of 114 to the minute. She lost very little blood considering the vast amount of dissection which was necessary in removing the growth.

Selected Papers.

THE RELATION OF DISEASES OF THE FEMALE GEN-ERATIVE ORGANS TO NERVOUS AND MENTAL AFFECTIONS.*

By B. Sherwood Dunn, M. D., Officer Academie.

THE essayist stated that his attention had been arrested by several articles from the pens of prominent neurologists which are contrary to the facts regarding the relation of the nervous sustem of disease of the female pelvic organs in woman, and that he attended the meeting of the American Medical Association at Denver almost expressly to hear the discussion of this subject by the two sections of neurology and gynecology, which met by agreement for its discussion.

He was called upon to take the place of one of the absent members appointed to read a paper on the gynecic side. His lack of preparation and imperfect presentation of his views persuaded him to prepare the present paper, in which he says.

My consideration of the subject will be limited to the great

^{*}Read before the annual meeting of the American Association of Obstetricians and Gynecologists, Pittsburgh, September 21, 1898.

neuroses of neurasthenia and hysteria and of insanity, and in order that I may not be misunderstood as to the premises from which I start, I will say that I am totally opposed to any operative procedure except where pathologic conditions are demonstrable. I have no confidence in operations upon healthy organs for the cure of any neurotic condition, and believe that such are now generally condemned by the profession.

One of the distinguished neurologists at Denver stated that "the disorders of her pelvic organs have no more to do with her nervous and mental disease than lesions elsewhere in her body; indeed, they have less to do with her psychoses and neuroses than most of her other organs."

Another in this same discussion declared that "all idea of curing neurasthenia or hysteria by operations upon the pelvic organs must be absolutely abandoned." And in another place he says: "The insanities are not due to local organic disease. Facts are rapidly accumulating to show that the insanities are due to disease of the neuron, structural and functional, the result of various poisons circulating in the blood. Surely it would be just as sensible to claim a cure of insanity by trimming the toe nails as to claim a cure by pelvic operations." And this by one of the leading neurologists in this country.

I look upon the position taken by some of our colleagues in neurology, that there is no relation of cause and effect between the various neuroses and psychoses and disease of the female pelvic organs, as being as extreme and condemnatory as would the advocacy of the removal of normal organs in the female pelvis for the cure of nervous diseases by some ill-advised persons calling themselves gynecologists.

In operating upon diseased conditions of the pelvis we do not expect to remove the symptoms of the neuroses, but only those symptoms properly belonging to the pelvic disease itself; but strange and disappointing as it may be to some of our critics, when those pathologic pelvic conditions are removed or corrected the nervous system, relieved from the source of unceasing irritation, gradually returns to its normal poise, and the patient is cured of her neuroses as well as her pelvic disease.

Our neurologists are proclaiming the same doctrine as did Professor Clifford Allbut in his Gulstonian lectures before the Royal College of Physicians in 1892 (but from which he has since recanted almost in toto), that there are a number of uterine and pelvic disorders which are but the manifestations of neuroses. In point of fact the statement needs to be made exactly the reverse, and so frequently is this met with in gynecologic practice that the gynecologist has become expert in their diagnosis and treatment.

The fact of the matter is that disease of the pelvic organs and affections of the nervous system are so frequently concomitant and interdependent that the neurologist is by far less likely to give due and proper consideration to the pelvic troubles than the gynecologist to the neuroses, because of his lack of practice and natural repugnance to propose and pursue vaginal examinations upon the patients that come to him, whereas, in the routine questions that from the history taken of every important case by the gynecologist, the neurotic and psychotic conditions present themselves, and are given the consideration which their importance demands.

The study of and acquaintance with the great neuroses and psychoses is forced upon the gynecologist by the very nature of his study and treatment, whereas the patient going to the neurologist does not expect, and in most cases would refuse, a pelvic examination at his hands.

In point of fact the neurologists see but a small percentage of the operative cases, and their views on the whole subject are prejudiced by this exceptional class, as well as by their imperfect and limited knowledge of the special department of the diseases of women.

I will vent are to say that there is not a prominent gynecologist but has seen numbers of women having diseased pelvic organs, and with pronounced nervous symptoms, who have come to him after having had the rest cure and various other treatments, and were restored to health by the cure of the pelvic lesions by operation. The position taken by many neurologists toward operations upon sexual organs of women is unfortunate for this class of cases, and it is well to remind them that remarks prejudicial to operative treatment act as suggestion upon neurasthenic and hysterical patients just as surely and detrimentally as does the unwarranted pelvic examinations at the hands of the gynecologist.

Hodge has proven that neurasthenia results from a loss of substance of the nucleus and cell protoplasm, expressive of wear and tear that is the invariable result of tatigue.

His experiments were made on animals and birds, and were conducted in a manner which left no doubt as to their accuracy. As a result of any continued reflex action, therefore, which denies to the neuron time for recuperation, we have produced a pathological condition which is seen in the shrinkage of the nucleus and cell substance, which robs the neuron of its functional ability to transmit the normal nerve influence and gives rise to the chronic fatigue symptoms of which all true neurasthenics complain, and these sy.nptoms apply to every part of the system—muscular, the special senses, mental, digestive, and derangement of the nutritive interchange.

The neurasthenic unit is a nerve force quantity. It may be a quantity in excess of the normal, or a quantity less than the normal. It may be nerve force out of balance, or nerve force delicately poised. It may be perverted nerve force. It may be nerve force overpowered by inhibition, or it may be controlled by a condition corresponding to a short circuited electric cell, in which all inhibitory power is lost. The protean manifestations of the neurasthenic state are accounted for, and only accounted for, by a condition of varying values. The neuron's molecular relation to the electric current has not been determined, neither has the nucleus and cell protoplasmic relation to the nerve force current been made out, but the neurasthenic condition doubtless travels in the direction of least resistance. demand has the power of attracting, in some way, nervous supply, but instead of the nerve centers supplying the demand with normal nerve force in a regular way, the centers supply a pathologic nerve force, or what amounts to the same thing, nerve force at irregular intervals.

With the conceded ground that the pathological condition is brought about by the influence of a too unrelaxed subjection of the nerve cell and protoplasm to functional activity, let the source of this activity be what it may, then the source of this irritation must be corrected if the patient is to receive any permanent benefit.

If neurasthenia is the result of a change in the nerve cell, due to too great exercise of its functional activity, then disease of the pelvic organs furnishes the most frequent source of this irritation, and as the primal cause must be corrected if a cure is to be affected.

The rest cure, tonics, and liberal diet may improve the condition of the neurasthenic suffering from pelvic disorder, but her condition becomes as bad and often worse than before when she is removed from the favorable environment and is again subject to the care and labor of daily life.

There is no time in a woman's life from puberty to old age that we do not have presented before us the intimate physiological relation between her generative organs and several nervous symptoms, and through these to every organ and part of her body. The acne of adolesence is an example of the influence of these organs upon the skin. The reflex connection between the mammary gland and these organs during the menstrual period can only be accounted for through the nervous system, and by what other influence are we to account for the malaise, slight nausea, headache, disturbed vision, flashes of heat, constipation or diarrhea, localized areas of hyperesthesia, and mild forms of hallucination, all of which are sometimes, and in some patients constantly, present during the catamenia, making their appearance with its onset and subsiding and disappearing with its close?

The intimate connection of the cortex with the ovary is shown by the fact that cortical disease arrests menstruation. These physiological relations we are intimately acquainted with, and if present physiologically I wonder who is going to convince us that in the presence of pathological changes the influence of these organs upon the nervous system will not be more pronounced; as, for example, the occurrence of various shades of optic neuritis and retinal irritation in connection with suppression or irregularity of the catamenia, slight epileptiform seizure of the facial muscles, laryngeal neuralgia, functional aphonia, tinnitus aurium, and vertigo.

As a consequence of menstrual irregularities we find painful irritation of the dorsal and lumbar spinal zones, functional irregularity of the cardiac rhythm, gastralgia, slight ichteric attacks, irritation of the bladder with frequent micturition, varietios of headache, and severe hemicrania. All these symptoms can only be accounted for as reflex vaso dilating or vaso-

contracting phenomena, the result of irritation in the uterus or ovaries arising from imperfectly performed physiological functions. We have all seen the acute disturbance of the menstrual function as a result of mental or physical shock, cold, heat, or great bodily fatigue. The spasmodic form of dysmenorrhea, which at one time largely occupied the attention of the profession, and which gave rise to as many forms of treatment as there were students of its phenomena, was rapidly explained and controlled after Dujardin-Beaumetz has shown that it was caused by enemic or toxemic blood.

There is perfect truth in the claim of the neurologists that ill health in woman is frequently the cause of her uterine troubles; but it is even more true that the various diseases of the uterus and its adnexa are the exciting cause of the ill health that frequently makes its appearance throughout her whole system.

The exact knowledge that we have of the physiological action compels a belief that these organs form the most prominent links in the chain of woman's health of both mind and body. It is unreasonable and unscientific to style a woman neurotic, hysterical, hypochondrical, and treat her as such, ignoring the while local disease of her pelvic viscera with aggravates and accentuates and in many instances is the exciting cause of these neuroses, and apart from these direct results there are those indirect evidences that follow upon interference with the secreting functions of the liver and kidneys and with the metabolic action of the spleen. I reiterate that it is a blind injustice to deliberately and complacently ignore the influence of local direase as a causative agent of morbid changes in her central nervous system.

In those cases where there are gross pathological changes, as for instance in those suffering with marked displacement of the uterus, with adhesion, extensive laceration of the perineum and cervix, the latter everted, completely eroded and ulcerated, edematous and tumefied ovaries with multiple fibroid growths in the uterine walls; in the opinion deliberately formed upon a basis of wide experience of the leading operators of the world, complete operation upon the universally diseased organs will invariably and promptly restore the patient to health and nervous equilibrium, and save her the expense and loss of time ac-

companying the rest treatment under the direction of the neurologist, which in these cases is vain, grotesque, and reprehensible. On the other hand, picture the case of an American woman, born and reared in the midst of luxurious surroundings, who marries at an age under twenty two, bears four or five children within a period of six years, and, following the practice of the majority of American mothers, undertakes to supervise the physical care of her children, not willing to leave them to the mercy and consideration of a hireling, particularly during the night. At about the end of this time the majority of these mothers become physically and mentally broken. They complain of weariness, nervousness, insomnia, inability to walk any great distance, constant bearing-down feeling in the pelvis, headache, both occipital and frontal, backache, disagreeable dampness of the hands, irritable bladder, hyperesthesia, points of tenderness in both ovarian regions, dysmenorrhea, dyspepsia, bad dreams, constipation. With ordinary common sense she attributes this tableau of symptoms to the strain of the rapidity of her child bearing, and presents herself to the gynecologist. Upon examination she has a slight tear in the cervix, slight rectocele and cystocele, relaxation of the ligamentous supports that permits of easy manipulation and displacement of the uterus. Both ovaries are sensible to examination. practical case for treatment at the hands of the neurologist. There may be those calling themselves gynecologists who would magnify the importance of the local pelvic condition and recommend the several plastic operations as a cure-all. But it must be said that they are not representative of the intelligence of this department.

There is no condition under which one could ever say he was operating to cure either hysteria or neurasthenia. We operate only to cure pelvic disease, but often the cure of these neuroses follows.

I will venture to say there is no class of physicians who are more methodical, systematic, or thorough in the examinations of their patients; there is no specialty in which there is a greater mass of statistical records than ours, and this comes from the almost universal habit of keeping the history book; and the market is full of innumerable varieties of them, a proof that they are demanded.

This book provides heads for family, personal, menstrual, marital, pain, functional, organic, and nervous history, going into the history of every organ and the general circumstances, surroundings, and condition of the patient.

In an admirable paper from the pen of Dr. J. H. Etheridge, the says: "The declaration is hereby made that in a large number of cases, in which perineal laceration and the neurasthenic state exist, they may occupy the relation of cause and effect," and follows with cases in detail supporting this declaration.

In a discussion before this society last year Dr. J. M. Duff detailed a number of cases supporting the ground taken in this paper.‡

The hysterical state is very largely self propagated; that is to say, when hysteria causes a yawn or crying spell, the way is paved for the second yawn or crying spell to take place easier than did the first.

When the hysterical state travels in the direction of the involuntary functions its production is more frequent, hence more damaging. Primarily this state is always the product of a weakened or non-resisting will, and is, therefore, a pure phychosis.

Hysteria and neurasthenia are often associated together, and when so related are difficult of division; as to just how much of the symptomatology is due to one or the other is difficult to say.

It can be said that whereas the symptoms of neurasthenia are seen most evident in the normal functions, and general somatic, those of hysteria are more pronouncedly psychical, with emotional outbreaks and loss of will power. When this disease affects the motor system the evidence is pronounced, as in paralysis, tremor, phantom tumors, etc. But far more common than these are the symptoms of anesthesia and hyperesthesia, the latter often seen as inframammary tenderness, and what used to be called ovarian neuralgia.

My friend, Prof. F. X. Dercum, has for a long time shown by ingenious bimanual palpation that this pain in the majority of hysterics is a superficial inguinal hyperesthesia.

[†]American Gynecological and Obstetrical Journal, February, 1898.

[†]Transactions of American Association of Obstetricians and Gynecologists, Vol. X, p. 218.

The cautious care exercised by my celebrated master, Prof. Charcot, in approaching every case of hysteria has given me an exaggerated respect for this disease, and experience has taught me to be exceedingly guarded in my prognosis as to the benefit that may follow operations in its presence.

Unlike neurasthenia, no fixed morphological pathology has been discovered for this affection, and we are totally unacquainted with its etiology. We know that it has a tendency to run in families, and that it is cured by all sorts and manner of treatment.

Prof. Charcot had great hopes for the usefulness of hypnotism in its treatment. We know it is most frequently met with in those of a neurotic diathesis, and in consequence continued nerve irritation from any source is liable to start it into activity.

It is frequently seen in connection with disease of the pelvic organs, yet it often persists after the pelvic disease is cured. On the other hand, pelvic operations have often cured a patient of hysteria, but innumerable other treatments have cured it also.

Dr. S. G. Webber, of Boston, related a case to me of a woman bedridden for six years who was suddenly cured by self suggestion following prayer by her minister. During her confinement she had presented many of the graver manifestations, including paralysis. No stronger evidence of a pure psychosis could be asked than this.

Let us now go on to the consideration of insanity. Insanity is an abnormal condition of the mental faculties. It may be due to defective development, acquired disease, or mental decay.

Two theories may be offered why inflammatory disease of the uterus and its adnexa are potent etiological factors in exciting alienation in females, the reflex theory and the internal secretion theory. The innervation of all the pelvic organs is supplied chiefly by the inferior hypogastric plexus, possibly the most important of all the nerve plexuses, controlling as it does the delicate and complex organic mechanism charged with the reproduction of the human species. The constant irritation of these lower nerve centers incidental to local disease must react upon the higher centers, begetting in some the delusional manifestations which determine mental alienation.

In the recent physiological theory of internal secretion we

may find the true solution of the deleterious effects than diseased sexual organs exercise upon the distant nerve centers. Some physiologists claim "there is a normal and constant contribution of specific material by the reproductive glands to the blood or lymph, and then to the whole body.* If the secretion theory is worthy of consideration, and I think it is, and these glands give off elements necessary to the economic equilibrium, it is possible that in the presence of diseased conditions they may give off vitated elements that act as toxines, and the implantation of pathologic conditions upon these organs must in no usual degree disturb the mental equilibrium, especially in those predisposed to mental weakness."

Jacobs, of Brussels inconversation with Lapthorne Smith, of Montreal, said he gave powdered cow's ovaries to his patients suffering with nervous troubles from induced menopause, and that he had cured several cases of insanity with this remedy. This is very strong evidence that the ovaries do secrete elements in the system essential to its equipoise.

Kraft-Ebing divides insanity into two great groups: disorders of the developed brain and those due to arrest of brain development. The last compromises idiocy and cretinism, which are incurable and therefore do not enter into this consideration of the subject. The other affections, as melancholia, mania, acute delirium, periodic insanity, moral insanity, hypochondria, hallucinations, hysteria, all belong to the developed brain.

Huxley says that in all intellectual operations we have to distinguish two sets of successive changes, one in the psychical basis of consciousness and the other in consciousness itself. As it is very necessary to keep up a clear distinction between those two processes, he says let one be called neurosis and the other psychosis. It is in the clear light of this definition that I make use of the word "psychosis."

In our consideration of hysteria as a psychosis in which the predisposition may be brought into active manifestation by a multitude of *point depart* from which must not be eliminated diseases of the pelvic organs as an exciting cause, so must these diseases be given due consideration in the etiology and treatment of the various forms of insanity, and the clinical facts that

^{*}American Text-Book, Physiology ed., 1896, p. 901.

are appearing from time to time, following the work of the gynecologist upon the insane, are rapidly assuming the proportions of statistics which demand and can not fail of careful and intelligent consideration by both the profession and the laity, the result of which will be that at no distant day the gynecologist will be a regularly appointed officer attached to all of our asylums.

Dr. A. T. Hobbs, assistant physician to the Ontario Asylum for the Insane, in a recent paper* states that upon examination of seven hundred and fifty females in the asylum, one sixth of them were found to be suffering disease of the pelvic organs.

He gives in detail the surgical treatment of thirty-two cases of general surgery, in none of whom resulted any mental improvement. He then says with reference to the gynecic cases, "the following observations apply to one hundred and ten cases conprising the number operated upon, exclusive of a number of cases too recent to be presented in this report."

It appears that those operations cover a period of over two years. Thirty-six per cent were completely restored mentally, twenty nine per cent showed an improved mental status. In twenty-nine per cent the mental condition remained stationary, and three per cent died. He gives details of the diseased conditions and operations performed, and in analyzing the results notes that the improved mental conditions followed the relief of a certain class of utero-ovarian diseases of inflammatory origin.

In closing he says: "I must emphatically state, however, that many of those who recovered their reason would not have done so without surgical interference. The almost instantaneous resolution of the mental faculties in some, and the steady evolution of the normal cerebral functions in others, can not but afford incontrovertible evidence in support of the relation of physical cause and mental effect."

Replying to a leter of inquiry, Dr. T. K. Holmes, of Charham, Ontario, writes: "My experience with nervous affections due to pelvic disorders is gathered from private practice entirely, and embraces thirty one cases. Twenty eight were puerperal mania, and three were cases of melancholia." (All of which were mentally cured by operation.)

^{*}American Journal of Surgery and Gynecology, Vol. XI, No. 1, p. 1.

In answer to my request, Dr. T. J. W. Burgess, Superintendent of the Protestant Hospital for the Insane at Montreal, has furnished me with the details of three cases of insanity. (All cured by operation.)

Although there are some neurologists of note who are opposed to all gynecic theories of nervous disease, there are others of equal reputation who consent that they are corelated.

In a discussion at the College of Physicians, Philadelphia, on "The Relation of Nervous Diseases in Woman to Pelvic Diseases," Dr. Weir Mitchell said: "Insanities of various types in women occur in which the menstrual period is sometimes the determinative cause of the mental disease."*

The writer then follows with statistico and details at length.

Translations and Forcign Reviews.

IN CHARGE OF

RICHARD H. WHITEHEAD, M.D., CHAPEL HILL, N. C.

THE SERUM TREATMENT OF PNEUMONIA.

HE remarkable success attending the use of the diptheria antitoxin has acted as a stimulant to workers in serum therapy generally, and it now seems possible that ere long we shall have an efficient treatment for pneumonia. earlier work of Netter and Foa has been reviewed and corroborated by the Klemperer brothers, but the greatest activity along this line has been exhibited by certain Italian investigators. As a result of their labors it seems established that, as in diphtheria, so in pneumonia most of the clinical symptoms are due to a soluble chemical poison—a toxin—manufactured by the bacteria and absorbed into the blood. Coincident with the advent of the crisis or lysis in pneumonia there appears in the blood of the patient an antitoxin, which in some way not now well understood, nullifies the effect of the toxin. Unfortunately the extreme difficulty or impossibility of maintaining the virulence of the pneumococci on artificial culture media for any length of time has hitherto formed an insuperable obstacle to obtaining

^{*}The Canadian Practitioner, April, 1898.

the pneumonic antitoxin in any but very small quantity; and thus it has not been possible for the remedy to be tested by physicians. However, an Italian pathologist, Pane, has been able to manufacture it in considerable amount, and a very careful clinician, De Renzi, has given it a thorough trial. Extracts from the latter's report (Il Policlinico, March, 1898,) are quite "The serum of Prof. Pane is obtained by immunizing asses and cows with large injections of cultures of extremely virulent pneumococci. This serum is most efficacious, and in the experimental pneumonia of animals has certainly solved the problem of antipneumonic serum therapy. In my clinic I have used this serum in a number of cases of pneumonia. Because of the small quantity of serum at my command, and because I wished to study its action only in extreme cases, I will say, at the outset, that by preference I employed the serum only in cases of the greatest gravity—cases in which my clinical experience led me to expect an unfavorable course. Until now I have treated with the serum in my clinic 33 of these cases, of whom three died,—a mortality of 9%; while in patients treated by other methods, and in less grave conditions than those subjected to serum treatment, the mortality reached the huge figure of 45%, -which is probably due to the fact that pneumonia patients delay entering the hospital until they are in a serious condition, and to the fact that the disease in these regions is especially malignant. Of the 3 fatal cases 2 died a few hours only after reaching the hospital, and hence probably before the serum had time to manifest its action; the third presented at the autopsy endocarditis, chronic nephritis, and diffuse arteriosclerosis." "After the injection of a considerable quantity of serum I always noted a marked fall of temperature. Patients with a temperature of 40° to 40.7° C. were so much benefitted that the fever fell to 38.5° or 38°, to then disappear entirely even before the usual period of crisis. I cite in this connection the case of a patient seen also by Prof. Rossoni, who on the third day of the attack, presented all the physical signs of croupous pneumonia but whose temperature was normal. She had been treated from the beginning with serum."

"In addition to its evident effect on the temperature, the serum influences most favorably the general condition and strength of the patient, while the disappearance of the local lesions is only a little hastened. Observing a patient affected with pneumonia but treated with serum, one immediately feels that no great severity can be present, so satisfactory is the general condition. Yet, I repeat, the cases treated by me with serum were only those which in the beginning were exceedingly grave."

FISTULA IN Ano.—According to Dr. Cooke, the following im- . portant points should be observed: (1) A careful physical examination of the lungs as well as of the entire rectum is to be made in every case. (2) Pulmonary tuberculosis is not necessarily a contraindication. (3) Do not put down the knife until certain that every sinus has been divided. (4) Remove all diseased tissues. Large wounds are not to be feared. (5) Caution: the sphincter is to be divided only once at right angles. special attention is to be given to the mucous opening. vasion of the perincum must be avoided, especially in females. (8) Systematic antisepsis is necessary if good results are desired. (9) Care and patience are required in the after-treatment. Dressings are not to be left to the family nurse. (10) In the aftertreatment two warnings are to be heeded, complaints of unusual pain by the patient and increase of the discharge. these may mean the formation of another abscess. (11) Hemorrhage and incontinence of fæces are the chief danger. Both are amenable to treatment and should not deter from the operation. - Medical News.

THE MAUSER BULLET.—In a paper read before the N. Y. Academy of Medicine, Dr. Wm. D. Bell (Med. Record) stated that at a greater range than 200 yards the Mauser bullet gave a small wound of entrance and only a slightly larger wound of exit If the bone was shot through at shorter range there was always some comminution. In several instances the Mauser bullet passed through the skull and out again without producing any apparent injury to the brain, and the men returned to duty in two or three days.

NORTH CAROLINA MEDICAL JOURNAL.

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Editorial

PROFESSOR BEHRING GIVES HIS REASONS.

It appears that not only have the American medical press been severely criticising Professor Behring for taking out a patent on diphtheria antitoxin in this country. According to the *Philadelphia Medical Journal* some caustic remarks were published in the *Berliner Tageblatt*, a well-known daily paper in Berlin, in which the action of Professor Behring is compared with the high morality of Helmholtz with his ophthalmoscope, Pasteur with his methods of immunization, Liebig with his chloral, and Lister with his antiseptic treatment of wounds, none of whom sought a patent for his discovery. In his reply

in the Deutsch Medicinische IVochenschrift Behring insinuates that these scientists would have turned their discoveries to their own financial profit if they could have, without difficulty, patented them. To make his course the less objectionable he states that he long since renounced the medical profession, and since then has been obliged to resort to business methods to enable him to pursue his experimental therapeutic investigations. He states that he was threatened with want of the necessites of existence; and he deplores the fact that while France has raised hundreds of thousands of francs for the Pasteur institute for the further application of serum therapy, Germany has done nothing. Moreover the "poor Americans" would in reality be benefitted by his patent, for he and his firm intended to give them at the same price more reliable preparations than those heretofore placed upon the market by American firms.

Has this explanation helped Professor Behring's cause in the eyes of the American profession?

Reviews and Book Motices.

Prompt Aid to the Injured, a Manual of Instruction in the Principles of. Including a Chapter on Hygiene and the Drill Regulations for the Hospital Corps, U. S. A. Designed for Military and Civil Use by Alvah H. Doty, M. D., Health Officer of the Port of New York; Late Major and Surgeon, Ninth Regiment, N. G. S. Y. N.; etc. Second Edition, enlarged and Revised. D. Appleton & Co., New York, 1898.

This volume is intended for the use of laymen who desire to inform themselves upon the subject of caring for persons who have received injuries when medical attention cannot be immediately provided. It is especially intended as a manual for the use of the hospital corps connected with the different military organizations. Dr. Senn has been impressed, in his work with the army around Santiago, with the fact that the result of a wound depends to a very great degree upon the first dressing it receives upon the battle field. This is also true in regard to wounds and injuries received in civil life. As the duty of the first care of the injured nearly always falls upon laymen, it is very desirable that all persons should inform themselves as to the proper thing to do until a physician can arrive. The volume

before us is well adapted for this purpose. The opening chapters are devoted to anatomy and physiology. Then follow chapters on bandages and dressings, antiseptics and proper care of wounds, fractures, hemorrhage, burns, asphyxia, poisoning, etc. There is also a chapter on hygiene, and one on the transportation of the wounded which includes the drill regulations for the hospital corps, U. S. Army,

The book is freely illustrated by figures and diagrams.

A History of Yellow Fever.—Indisputable Facts Pertaining to its Origin and Cause. By W. L. Coleman, M. D., Houston, Texas.

In this little monograph of one hundred and forty pages the author gives his views as to the origin and cause of yellow fever, its present artificially acquired habitat, with reasons going to show the possibility of its complete extinction from the globe. His observations are based on forty years' observation and study of the disease. He strongly endorses Audouard's theory that the disease originated in no country whatever, but was born upon the high seas as a specific infection generated from peculiar filth found in the holds of African slave ships. His tracing of the history of the slave trade and yellow fever seem to bear him out in his deductions. He claims that the disease has been driven into its last trench in the filthy harbor of Havana, and that as the tides and waves of the ocean have cleansed the harbors of the Atlantic coast cities of the United States, the source of all the recent epidemics can be driven out of Havana harbor by the construction of canals which will create a current through the harbor.

Review of Current Literature.

PEDIATRICS.

IN CHARGE OF

J. W. P. SMITHWICK, M. D., LAGRANGE, N. C.

MISTAKES IN THE TREATMENT OF TALIPES (EQUINO-VARUS).—In an article (Int. Jour. or Surg., Vol. XI, No. 10) Dr. William V. Morgan calls attention to mistakes made in treating club-feet. He says, other

things being equal, in non paralytic talipes the patient should be prepared to walk nearly as early as children without such deformity. But instead we often have coming to us patients older than two years for treatment, the parents making the voluntary statement that they were advised to wait till the child was stronger, and in most cases to this delay can be charged the necessity for excision and other mutilating operations. In congenital cases the treatment should begin immediately after birth, and the correction will depend more upon the persistency than the severity, and the hearty co-operation of the mother should be secured, whose hand is guided both by duty and love. At this stage the plastic tissues readily yield to the applied force, so that by the natural time for the child to walk the feet are in proper condition to receive the corrective force of the body weight.

He argues early treatment in all congenital cases, and admonishes us not to make the mistake of waiting for the patient to grow stronger. He says the time to begin treatment is when the patient is first seen.

RHEUMATISM IN CHILDREN.—Dr. Philipp F. Barbour in a paper read before the Louisville Clinical Society (Pediatrics Vol. VI, No. 7) treats of this trouble as observed in children in a very sensible manner. He says the three cardinal symptoms of rheumatism—a swollen and inflamed joint, high temperature, and a profuse acid sweat—found accompanying the disease in adults, are not found in children. The swollen and acutely inflamed joints are seldom seen, the temperature runs a much milder course, and the acid sweats are rare. However, the investigations of recent years show that children are more frequently attacked with rheumatism, but the symptomatology is more varied than in the case of older people. Authorities claim that it is distinctly hereditary, and hold that from 50 to 70 per cent is not too high an estimate for such cases. Cold and exposure are immediate causes of an attack, and females seem more liable to the disease than males in chilshood.

The symptoms most characteristic are arthritis, endocarditis, and fibrous nodules, and the symptoms which are suggestive are chorea, torticollis, tonsilitis, and erythema.

The arthritis is usually very mild, there is little swelling and perhaps no redness, temperature of 100 deg. F. to 101.5 deg. F., and probably there is no complaint on the part of the child except at bedtime when the "growing pains" are complained of. "Growing pains" are often the precurser of endocarditis, but should not be confounded with the various affections of the joints dependent upon other diseases such as syphilis, rachitis, tuberculosis, scurvy, and traumatic injuries to the joint.

Endocarditis is very much more frequently a complication of rheumatism in children than in adults, and valvular lesions are often discovered in children in whom it is often difficult to get any history at all of the attack of rheumatism. However, the development of a murmer

in childhood is not of so great prognostic importance as in those who are older. These, nevertheless, should not be mistaken for anaemic murmers, and vice versa, for all rheumatic children are more or less anaemic. There are, as a rule, no subjective symptoms connected with the development of endocarditis, as compensation is easily arranged in the young. The fibrous nodule was first discovered by Barlow and Warner in 1881, and are small fibrous bodies, varying in size from that of a pea to that of an almond, occurring more frequently at the back of the elbow, or over the malleoli, though in a few cases he has seen them scattered over the whole body, and were painful. Cheadle states that these nodules occur only in rheumatism.

Chorea, torticollis, tonsilitis, and erythema are not so frequently overlooked as the above symptoms, as they are diseases which require treatment in themselves. However, their close relation to rheumatism is not often remembered, and consequently a severe endocarditis complicating one of them may escape notice.

Chorea has become more associated in the professional mind with rheumatism than the other three, and if we get an accurate history in choreaic patients we very frequently find that one or more symptoms of rheumatism has preceded, accompanied, or followed the chorea, and no case of this disease should be treated without thorough examination of the heart at short intervals.

Tonsilitis is often recognized as a form of rheumatic infection, and its treatment by anti-rheumatic remedies has been attended by the happiest results.

The erythema papulosum and erythema marginatum seem to be closely connected with rheumatism. Has noticed erythema marginatum more frequently than the other variety.

Torticollis is one of the local forms of muscular rheumatism occurring as a complication in a mild degree in many cases.

The diagnosis of rheumattic affections in children is usually easy. The mild arthritic lesions, the slightly elevated temperature, the pains in the extremities, "growing pains," or a fever continuing for several days with no objective symptoms, should put us on our guard, especially if there is a history of rheumatism in the family.

The treatment consists in using salicylic acid in some form. The ammonium and sodium salts seem the less disagreeable, and the author prefers the ammonium salt, as he thinks it counteracts the depressing effect of the salicylic acid, and is not nearly so nauseating, and may be pushed rapidly till the effects are secured. Some cases are entirely unable to take salicylic acid in any form, and in these the relief of pain must be effected by the administration of some coal tar preparation in small doses. If the profuse acid sweats occur they would suggest the use of an alkali. The special indications should be met by appropriate treatment.

In the tendency to the recurrence of the attacks a general tonic treatment should be instituted. Cod liver oil, iron, arsenic, and mercury

should be given. Suitable clothing should be provided, and protection from cold and dampness insisted upon, and every effort made to keep the child in good condition. The special tendency of rheumatism to effect the heart in childhood should never be forgotten.

Miscellaneous Items.

RECENT STUDIES IN STARCH DIGESTION.—Dr. Henry Leffman (Phil. Polyclinic) has been engaged for a number of years in the study of the conditions interfering with starch digestion, especially as regards foodpreservatives. For these experiments arrow-root starch has nearly always been used. Its advantages have been that it can be obtained in a high degree of purity and is rapidly and completely digested by ordinary enzyms. Lately experiments have been made with other starches, especially those of corn, potato and wheat, and the contrast between these on the one hand and arrow-root on the other has been very striking. The arrow-root is in a few minutes completely converted, the solution showing no trace of starch, but with the other starches the conversion is slow, unchanged starch being found for a considerable time. The newly introduced enzym, taka-diastase, acts rapidly and completely on arrow-root starch, but only imperfectly on the common food-starches. A principle that seems to grow out of these as yet limited researches is that in applying arrow-root starch as an ingredient of invalid diet. empirical practice anticipated scientific investigation, and a wider use of this starch may be advisable.

Some Observations on Brain Anatomy and Brain Tumors.—Abstract.—Dr. William C. Krauss, of Buffalo, read a paper at the 92nd annual meeting of the Medical Society of the State of New York, Albany, Jan. 25, 1898, with the above title.

He called attention (1) to the difficulty in remembering the gross anatomy of the brain, and (2) to the almost universal presence of optic neuritis in cases of brain tumor.

He attempted to overcome the difficulty in regard to the anatomy of the brain by formulating the following rules, which are somewhat unique and original, and at the same time easily remembered.

Rule of two.—1. The nerve centers are divided into two great divisions, (1) encephalon, (2) myelon. 2. The encephalon is divided into two subdivisions, (1) cerebrum, (2) cerebellum. 3. The cerebrum, cerebellum and myelon are divided into two hemispheres each, (1) right, (2) left. 4. The encephalon is indented by two great fissures, (1) longitudinal, (2) transverse. 5. Into these great fissures there dip two folds of the dura, (1) falx cerebri, (2) tentorium cerebelli. 6. There are two varieties of brain matter, (1) white, (2) gray.

Rule of three.-1. There are three layers of membranes surrounding the brain, (1) dura. (2) archnoid, (3) pia. 2. Each hemisphere is indented by three major fissures, (1) sylvian, (2) rolandic or central, (3) parietooccipital. 3. Three lobes, frontal, temporal and occipital, on their convex surface are divided into three convolutions each, -superior, middle and inferior, or 1st, 2nd, and 3rd. 4. There are three pairs of basal ganglia, (1) striata, (2) thalami, (3) quadrigemina. 5. The hemispheres of the brain are connected by three commisures, (1) anterior, (2) medi, (3) post-commissure. 6. The cerebellum consists of three portions, (1) right, (2) left hemisphere, (3) vermes. 7. There are three pairs of cerebellar peduncles, (1) superior, (2) middle, (3) inferior. 8. The number of pairs of cranial nerves, in the classifications of Willis and Sommering, can be determined by adding 3 to the number of letters in each name: that of Willis making 9, and that of Sommering making 12, (or the name containing the more letters has the larger number of pairs of nerves, and vice versa). 9. The cortex of the cerebellum is divided into three layers of cells, (1) granular, (2) Purkinje's cells, (3) a molecular layer.

Rule of five.—1. Each hemisphere is divided externally into five lobes of which four are visible, (1) frontal, (2) parietal, (3) temporal, (4) occipital; and one invisible, (5) insula (Isle of Reil). Roughly speaking, the visible lobes correspond to the bones of the cranium: that is, the frontal lobe is underneath the frontal bone, the parietal lobe beneath the parietal bone, etc. 2. The brain contains five ventricles, of which four are visible—the right and left, or 1st and 2nd, the 3rd and the 4th; and one invisible, the 5th or pseudo-ventricle. 3. The cortex of the brain contains 5 distinct layers of ganglion cells.

Studying carefully 100 cases of brain tumor in which an ophthalmoscopic examination had been made for the presencer o absence of choked disc (optic neuritis) Dr. Krauss announced the following conclusions:

- 1 Optic neuritis is present in about 90 per cent of all cases of brain tumor.
 - 2. It is more often present in cerebral than in cerebellar cases.
- 3. The location of the tumor exerts little influence over the appearance of the papillitis.
- 4. The size and nature of the tumor exerts but little influence over the production of the papillitis.
- 5. Tumors of slow growth are less inclined to be accompanied with optic neuritis than those of rapid growth.
- 6. It is probable that unilateral choked disc is indicative of disease in the hemisphere corresponding to the eye involved.
- 7. It is doubtful whether increased intracranial pressure is solely and alone responsible for the production of an optic neuritis in cases of brain tumor.—Philadelphia Medical Journal.

Therapeutic Bints.

TREATMENT OF WHOOPING-COUGH.—Dr. F. Grundrum, of Sacramento, Cal, in a recent issue of the *Therapeutic Gazette* presents an outline of his treatment for pertussis as follows:

Belladonna, quinine and bromide of soda are the cardinal drugs, and a frequent order and form of medication would be the following perscriptions, furnishing and changing pro re nata:

- B. Calomel, gr. j. Ipecac, gr. j. Sacch. lact., gr. xx.
- M. Make eight powders. Sig.

One everyhour till all are taken, to be followed by caster oil.

After motion of bowels:

- B Sodii bromid, 3 ij.
 Atropinæ, gr. ½ to 1/4.
 Syr. aurant. or prun. virg., ad 3 iij.
- M. Sig. Teaspoonful every three hours, to be continued till pupils are dilated or cough ceases.

At the same time use two grains of quinine sulph, in pill, capsule, or suspended in syrup, every two hours until hearing is affected. In two cases cited, improvement was marked and paroxysmal cough was controlled in from four to six days. The three agents—atropine, quinine and bromide of soda—are pushed until the constitutional effect is obtained, watching against too great dosage of any if the disease does not yield sooner. The dietary and hygiene of the patient are also carefully looked after.—Ex.

Acute Gastro-enteritis. -

Dose.—Two teaspoonfuls every three hours until the stools are formed; and then one teaspoonful thrice daily.—Dr. Herwisch, Philadelphia Polyclinic.

TREATMENT OF TINEA TONSURANS.—Sheffield (New York Medical Journal, May 14, 1898) claims that by the following method every case of ringworm of the scalp may be cured in from three to six weeks. The hair is to be clipped close to the scalp, and the following mixture thickly applied by means of a painter's brush, once a day, for five successive days:

Acidi carbol	
Ol. petroleiaa	65.
Tinct. iodi.	
Ol. ricini,aa 1	90 .
Ol. rusciq. s. ad 5	

On the sixth day the application is to be wiped off with a rag dipped in olive oil, the hair clipped again, and the scalp washed thoroughly with green soap and a soft nail-brush. This process is to be repeated regularly for three or four weeks, and is to be then followed by the application of a ten per cent. sulphur ointment for a few days. Finally, the following lotion is to be used for two weeks:

Resorcin	******
	aa 16.
	q. s. ad 500.
	-Gaillard's Medical Journal.

SCARLATINA.—Begin treatment with the administration of calomel; then give throughout the disease:

B. Chloral, gr. xxx. Syr. lactucarii, Aquæ, aa 3 ss-3 j.

M. Sig. Teaspoonful in ice water every two or three hours. Complete narcotism should never be attained.—Wilson, Polyclinic.

PHTHISICAL COUGH.—In the hacking, irritable cough of phthisis, unattended with much expectoration:

B. Codeine, gr. iv.
Diluted hydrochloric acid, 3 ss.
Spir. of chloroform, 3 iss.
Surup of lemon, 3 j.
Aq., ad 3 iv.

Make an emulsion. A teaspoonful frequently, when cough is troublesome.—Murrell, Medical Record.

FACIAL ERYSIPELAS. -

Carbolic acid	ŧ	ounce.
Tincture of iodine	1	ounce.
Alcohol	I	ounce.
Oil of turpentine	2	ounces.
Glycerin		

The lesions to be painted with this every two hours and covered with aseptic gauze.—Presse Medicale.

Motes and Items.

TULANE UNIVERSITY.—As happened last year, the opening of this excellent school has had to be postponed from October 20th to November 10th, on account of yellow fever quarantine. The regular lectures will begin November 28th.

DR. CLAUDIUS H. MASTIN, aged 72, died at Mobile, Ala., October 31, 1898.

DR. JOHN R. CHAPPELL, aged 70, died at Petersburg, Va., September 26, 1898.

THE ATLANTIC MEDICAL WEEKLY, published at Providence, R. I., suspended publication with the issue of October 1st. Unexpired subscriptions will be filled by the Philadelphia Medical Journal, so the subscribers will not be the losers.

THE YELLOW FEVER in the South is assuming extensive proportions, though the disease seems to be of mild form and the mortality small. It has spread until the whole state of Mississippi is practically infected. Tens of thousands of people have fled from that and adjoining states to remain until frost has cleared the field of the enemy. Frost was officially reported from several points in Mississippi on the 14th, and the probability is that the epidemic of 1898 will soon be ended.

THE AMERICAN MICROSCOPICAL SOCIETY, at its recent annual seasion, elected the following officers for the ensuing year: President, Dr. William C. Krauss, of Buffalo; first vice-president, Professor A. M. Bleile, of Columbus, O.; second vice-

president, Dr. G. C. Huber, of Ann Arbor, Mich.: Secretary, Professor Henry D. Ward, of Lincoln, Neb.; Treasurer, Magnus Pflaum, of Pittsburg; Executive Committee, Professor S. H. Gage, of Ithaca; Dr. A. Clifford Mercer, of Syracuse, and Dr. V. A. Moore, of Ithaca.

VIRTUE HAS ITS OWN REWARD.—The Editor of the Medical Mirror gives the following as the original essay of one of a class of children of six to eight years of age. The compositions were not to be revised by the teacher until read.

A poor young man fell in love with the daughter of a rich lady who kept a candy shop. The poor young man could not marry the rich candy lady's daughter because he had not money enough to buy furniture. A wicked man offered to give the young man twenty five dollars if he would become a drunkard. The young man wanted the money very much so he could marry the rich candy lady's daughter, but when he got to the saloon he turned to the wicked man and said: "I will not become a drunkard even for great riches. Get thee behind me Satan." On his way home he found a pocketbook containing a million dollars in gold. Then the young lady consented to marry him.

They had a beautiful wedding, and the next day they had twins. Thus, you see, "virture has its own reward."

CORNELL UNIVERSITY MEDICAL COLLEGE held its opening exercises on the evening of October 4th, in the building it is to occupy temporarily in the Bellevue grounds until its own building is finished. Dr. Lewis A. Stimson called the students, numbering three hundred and fifty, to order, and introduced President Shurman, who delivered an address. He was followed by Prof. W. M. Polk, dean of the medical faculty, who outlined the work of the session. The new building is to be erected on First Avenue, and will occupy the frontage from Twenty-seventh to Twenty-eighth Street.—Medical Record.

THE FIRST FOOTBALL DEATH of the season was reported from Boston on October 1st. A boy, seventeen years old, was thrown during a scrimmage, four or five men of his own and the opposing eleven coming down on top of him. It was not until he tried to arise that his comrades had any idea that he was severely

injured. They then found that he was unable to move. At the City Hospital it was found that he was suffering from a fracture of the spine. An operation was performed, but the lad died the following morning.—Medical Record.

WANTED: BRAINS.—Dr. Burt G. Wilder, Professor of Physiology on the Cornell Staff of Instruction at Ithaca, has recently issued a circular asking prominent men of the country to bequeath their brains to the University. In it he states that while it is easy to procure the brains of criminals and the insane or ignorant, it has hitherto been extremely difficult to obtain those of persons in whom the cerebral development is beyond the average, and that it is highly desirable for the advancement of science that a considerable number of brains of this character This request, which has been circulated should be secured. principally among the students and graduates of Cornell, is accompanied by a blank form of bequest, which, however, contains a clause by which the legacy becomes void if serious objections is made by the relatives of the deceased. - Boston Medical and Surgical Journal.

Suicide of a Young Physician.—Henery E. McDermott, Assistant in Physiological Chemistry in the College of Physicians and Surgeons, New York, recently died in New Haven, from the effects of prussic acid, which he is supposed to have taken with suicidal intent while suffering from mental depression resulting from continued ill-health. He was graduated with high honors from Yale University in 1896 and was a student in the Yale Medical School until last spring, when Prof. R. H. Chittenden invited him to become his assistant in the Medical department of Columbia University, a very unusual honor for so young a man.—Boston Medical and Surgical Journal.

THE MANCHINEAL TREE.—Dr. J. T. Rothrock, Commissioner of Forestry, Department of Agriculture of the Commonwealth of Pennsylvania, has published and distributed a circular warning soldiers in Cuba to beware of the Manchineal tree.

It grows along the seashore in Cuba and the West India Islands generally.

It is from forty to fifty feet high, has oval, pointed, toothed, shining leaves, which are from three to four inches long.

When the fresh leaves are pulled off a drop of milky juice comes from the leaf stem.

The fruit is a yellowish green, fragrant, and somewhat resembles an apple in shape.

If bitten into makes the mouth very sore for a time and may produce serious results.

After handling any part of the tree—root, leaves or fruit—rubbing the eyes may cause them to become seriously inflamed.

Mucous membranes (such as the red margin of the lips or eyes or anus are particularly subject to its poisonous effect.)

It is said by many of the natives to cause poisonous effects even if the tree is not touched, but by simply being in its neighborhood.

Many persons are alleged to have been injured from being under the tree during a shower, when the drops of water fall upon them from the tree.

Some persons are more sensative to the effect of this poison than others. In fact there are few who are not affected by it at all, just as is the case with our poison-oak or poison-ivy, the chief difference being that the manchineal affects the mucous membranes, above aluded to, more than the skin proper, whereas the poison ivy affects the skin much more frequently than it does the mucous membranes.

Many persons of experience in the tropics assert that it is unwise to camp near this tree.

If poisoned by the manchineal, and beyond reach of your surgeon's help, the best thing to do is to wash the part affected freely with salt-water.

It is sometimes called by the natives manzanilla (pronounced man-za-ne-ya).

PILONIDAL SINUS.—The occurrence of a suppurating sinus containing hair and located in the coccygeal region is by no means very uncommon. In some cases this sinus becomes clogged and an abscess forms. That the real cause of the suppuration is often not recognized is shown by the fact that cases often come to our clinics in which the sinus has been opened and packed, in some instances several times, without removing the little tuft or coil of hair which gives rise to the trouble. Probably a slight congenital dimple in which perspiration and filth accu-

mulate, and an abundant hairy growth exist in most cases acts as predisposing causes. Strange to say, this condition is not mentioned in most textbooks on surgery, or even in the large systems of surgery and special works on diseases of the rectum, and when mentioned the names applied are for the most part inappropriate. Coccygeal fistula is incorrect, for it does not discharge the secretion of an organ; dermoid cyst is likewise incorrect, for it is not a congenital affair and is said never to occur until after puberty when the hairy growth in these parts is well developed; the French name, posterior umbilicus, has no descriptive value. The late R. M. Hodges, of the Massachusetts General Hospital. Boston, suggested the name pilonidal sinus, which has also been adopted by Kelsey, and its derivation from pilus, a hair, and nidus, nest, seems to make it the best descriptive name. The most essential point, however, is that the condition be recognized and the hair, including its roots, thoroughly removed.— Philadelphia Medical Journal.

Reading Potices.

Tuberculosis of the Lungs.—Dr. Landon B. Edwards. Professor of Medicine, University College of Medicine, Richmond, Va., reports in Vol. 53, No. 15 New York Medical Record, 35 cases of tuberculosis of the lungs treated by serum with 11 total recoveries, and by recovery he means, disappearance of bacilli, healthy respiratory action, chest expansion increased from one to two and a half inches, flesh increased to normal, and that the patients look well and according to physical signs and symptoms are well. He notes other patients improving and states that the record is greatly better than he ever obtained with any other treatment than serum; that he had used no other serum than Paquin's of St. Louis.

J. J. Grant, M. D., Monticello, Fla., Says: I find nothing in the materia medica to equal Aletris Cordial in uterine diseases. I have used it in a very obstinate case, which outstood several important remedies. When I put the patient on Aletris Cordial every diseased symptom disappeared in a week's trial. I have used it in several cases, and can, therefore, say, that it is an active and powerful agent, for diseases of the womb.

FOR ACUTE CYSTITIS.—Bromide of Potash oz. ½; fld. ext. gelsemin. gtt. 10; fld. ext. hyoscyam. dr. 2; lithiated hydrangea (Lambert), q. s. ad oz. 4. Mix. A desertspoonful every four hours. Milk and flax seed tea as drinks.—Kansas Medical Index.

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Original Communications.

PRESIDENT'S ADDRESS.*

By Francis Duffy, M.D., Newbern, N. C.

Gentlemen of the Medical Society of the State of North Carolina:

In accordance with the rules of this Society, it becomes my duty to present to you an address on assuming the functions of the office to which you have done me the honor to call me.

Some of the presiding officers in our past history have discussed medical topics by inviting the attention of the society to some chosen subject, others have looked over the field which we occupy and have advised, according to their judgment, such action as was likely to promote the objects which we, co-laborers, are seeking to attain, while other addresses have been inspiring and elevating by sentiments expressed, not merely rhetorical and pleasing the ear, but utilitarian in the highest sense, like a poem, which by stirring and emotions builds resolve. and has its fruition in the best deeds of men.

I desire to submit to your consideration certain matters which, during my connection with the Society, have occurred to my mind from time to time. First, as to the necessity of increasing the membership and usefulness of our Society. It is obvious that all the legislation regulating the practice of medicine and maintaining a higher standard of medical education in the State

^{*}Read at 45th Annual Meeting of the North Carolina Medical Society, Charlotte, May 3, 1898.

has originated in the presistent organized efforts of the North Carolina Medical Society. The same may be said as to the enactment of laws establishing the Board of Health, or in any respect pertaining to public sanitation. As the importance of these matters can hardly be over-estimated, it is evident that anything tending to build up the Society and increase its power must be of corresponding importance. In this connection I call attention to the fact that since written examinations have been adopted by our Medical Examining Board, it has been impracticable for licentiates of the Board to join the Medical Society during the meeting at which they were licensed. Reference to Society Annals will show that a much larger number have been licensed than have become members of the Society at the same session. These young men form the best element from which to recruit the ranks of the Society. When they miss the first opportunity, they do not as a rule have the same interest in public medical affairs that they would have as members of the Society. They do not often go long distances to join, one of the migratory incursions which does not usually occur oftener than once in a decade. If our Medical Examinidg Boards would shold their meetings long enough before the Society met to finish their examinations and report thereon before the adjournment of the Society, these disadvantages would be obviated, and at the same time the law complied with, which r quires that the Board should meet at the same time and place as the Medical Society.

I believe it would be well to remit the usual initiation fee to those who join during the year in which they receive their licenses. This, instead of being a loss to the Society, would likely be a gain, as the annual dues in 2½ years will amount to \$5.00, while the average length of time which elapses before the joining of those, who join at all, is much longer than that period, while many never become members of the Society; besides many meritorious young men have spent all their money in obtaining medical education and license, and have not even \$5.00, to spare at the time they have to equip themselves for practicing their profession. There are other reasons than those I have touched upon, why the way should be made easy for young men to join the Society. The first year of professional life is the formative stage

of professional character. The moral sense and those delicate instincts, which point to rectitude as their polar star, are not strong alike in all, nor have the home influences and other sources of training which build upon the foundations of character been the same. Young men of various bias, without any knowledge of the Code of Medical Ethics, enter a profession which from the time of Hypocrates has had its Ethical Code, and which as it is to-day is the outgrowth of the wisdom and experience of generations of practitioners who stand upon the delicate ground where meet self interest and self abnegation. These first years of professional life are, with many, associated with necessities which would naturally foster carelessness. Is it any wonder that there are so many deviations from the paths of moral and Ethical rectitude?

The influence of a Medical Association is very beneficial in forming and promulgating rules to harmonize and make pleasant the business relations of medical men; in stimulating the efforts of co-workers, by which they become co-educators and in inspiring higher ideals from which spring higher realizations.

I trust it is not amiss to make further suggestions as to the work of the Board of Medical Examiners, for although the Legislature has given them full power to fix the standard of qualification and make by-laws governing their own action, the elective power in choosing these Boards is vested in the North Carolina Medical Society, and the sentiments of the Society would naturally be reflected by the Board chosen.

It has been and is the custom to admit to examination any and all persons presenting themselves. The only requirement being the easy-to-be-obtained certificates of moral character, and the merit of having existed 21 years. It by any means the applicant can answer a certain percentage of questions propounded, he obtains a license founded on the declaration that he is found qualified to practice medicine in all its branches.

In those parts of the world where the standard of medical education is highest, men are admitted to examinations only after a sufficiently long training, not only didactically, but clinically and in the laboratory. The mere correct answering of a few questions on a branch of medicine, regardless of antecedent practical training or experience, cannot be sufficient evidence of

qualification. To obviate this difficulty it has been proposed to have clinical examinations. This is hardly practicable. Sufficient material of different kinds are hard to obtain. The diagnosis of any given subject once made would soon become known to all, and even if the candidate failed in the clinical test, he yet might average the percent necessary to obtain license. An examination which ignores the candidate's past as to training would require to be long and tedious, especially if clinical and laboratory teatures are included. Better, far, trust something to schools which are equipped for giving all necessary training and require all candidates for examination to give evidence sufficient clinical and laboratory experience. If the examining Board have not authority to regulate these matters, our law ought to be amended.

Another matter of importance may be harder to regulate, yet worthy of the attempt. Namely the interchange of courtesies between the States, at least those bordering on North Carolina. Where a sufficiently high standard is maintained by any State Board its licentiates might very well be admitted to other States. It means an unnecessary hardship, for instance, for a physician living on the border of North Carolina and Virginia to have to pass the Boards of both States.

It may be like the re-threshing of old straw to refer to the importance of public hygiene, and the necessity of procuring legislation for the promotion of that object, but as that sort of straw has yielded so comparatively little of the grain which it is capable of producing, I am impressed that we should continue to thresh. As far as we are concerned, I do not feel that it is necessary to remind this body of these things, much less to offer instructions, but with the people in general as well as their legal representatives it is different. They have not yet found out the best way to spend their money with the medical profession to get the best returns. With them, the time honored function of the doctor is to apply remedies to diseases, and according to the law of supply and demand, the physician usually equips himself for the performance of that function, and by solicitation and practice grows in that direction. It is not my purpose to derogate this part of the physician's work. The world would be much poorer without the legitimate use of opium, chlorcform, cocain, quinine, iodine, mercury and other remedies. If the evil is upon us, that which removes or mitigates it will continue to be appreciated and sought, but where cure can save its thousands, prevention can save its tens of thousands, and it is a crying necessity to-day that this fact receive both a thoeretical and practical realization by the whole people.

Before we can hope to leaven the whole lump of the body politic let the physician scrutinize himself and the field that he occupies, to see how far he is the exponent of the true science, or to what extent he typifies or justifies a recent cartoon that represents nature and disease in fierce combat, while the doctor comes up blind-folded, and with his cudgel strikes right and left, now striking the disease and now the patient.

The history of the application of therapeutic measures (drugs mainly) does much to justify this cartoon. It is not necessary to more than refer to the incantations and other absurdities of ignorance and superstition which were in keeping with the dark ages in which they practiced. Within the memory of the men of to-day, famishing fever patients have been deprived of water by their mis-guided attendants, who were governed by tradition and custom, rather than by the dictates of common sense, and the unerring cravings of nature. Even the foul air of the patient's room was carefully confined by closing the doors and windows, and perhaps his strength still more reduced by copious blood letting.

My mother related to me an experience in her early life. Her father living on his plantation was stricken with fever, and after some days, or weeks, of bleeding and famishing he died. A number of his negro slaves were also stricken and under the same management went the same way. One servant begged to be let alone, and not subjected to the treatment. His wishes were gratified and he alone recovered. I remember the old man well. He lived to advanced age.

Homeopathy and a number of other pathies, in spite of their absurdities, had fruitful soil in which to grow. They were less aggressive on the persons of the suffering sick, and if they gave no aid, were not so likely to hinder natural recoveries, and so the regular profession looked on, learning from experience, grew in knowledge, by its natural evolution, and became wiser than

their critics. But the medical millennium has not yet come, nor are the days of mal-practice past. Even among operative procedures, the fads of gynecologists and the exploits of those seeking fame by startling measures in other fields require constantly to be challenged, to show cause why they should not be discontinued. If the novice takes up an optimistic modern work on materia medica, and studies the physiological effect of drugs and their therepeutic application, he might easily be impressed with the belief that drugs could control every pathological process, and remove every morbid condition. Coupled with these studies, he is very much surprised to find that works on practice of medicine (perhaps especially those of the scientific Germans) will give exhaustive descriptions of disease, pathology, etiology, clinical history, diagnosis, and prognosis, but beyond general reference to hygiene, nothing specific as to the treatment. The fact of the limited power of drugs to work beneficial changes, begins to dawn upon him, and that even those that are of undoubted value are like edged tools, and require careful handling. our comparatively harmless quinine, which so effectually destroys the malarial plasmodium has been made to do its share of harm. On no less authority than the German professor, Leibermeister, 40 grains at a dose have been given to typhoid patients. recent years the cold tar antipyretics were hailed with delight. Fever killers had come at last! A Baltimore professor told his class that antipyrine was what he had been praying for. I think you will agree with me that more patients than fevers have been kllled by them; and these remedies are in rather common use among the laity.

Not many days ago I visited a child to whom the mother had administered a dose of acetanilid before the cold stage of an intermittent fever had disappeared. Alarming symptoms followed. Another case came under my notice, where a farmer had administered a dose of acetanilid under similar circumstances. The child died, apparently from its effects.

Not many years ago, the doctrine was promulgated that disease, a condition of lowered vitality, required to be combatted by copious administration of alcoholics. This fascinating theory had many adherents, and did much harm. In the field of dietetics, we went from starvation to stuffing. Even to-day an

American text book advises that a typhoid fever patient may take as much as six quarts of milk a day, a quantity that has been shown by physiological experiment to be one-third more than the full digestive capacity of a healthy man, eating nothing else and digesting all the day. We have no infallible guides. Our reason must challenge every theory, and our experience prove all things, and hold fast to that which is good.

But why this arraignment of a profession, which in the matter of education, conscientiousness and faithfulness compares favorably with any on earth. It is to lament that our most uncertain and dangerous functions are most in demand; that millions of dollars are paid by the people for the practice of medicine as it is being done, and as to some little extent has been indicated in the foregoing pages, while our best functions or capabilities are dwarfed by disuse and neglect. The public health office would have to be a missionery at his own expense, while a premium is put on disease. This is not a mere perverse and unnatural choice of the people. They are as wise as we are, and will seek their own good as they conceive it to be- We are of them, and differ only as regards these matters in knowledge.

If they, the masses of the people, knew as much of the sources of the disease as the educated, better element of physicians, who do you suppose would be in the van of the procession to stamp it out? The man who reaps a harvest when disease runs riot or the man who pays the bills? That the people should become possessed of this knowledge is the prime requisite, for should we obtain such legislation as in our judgment was all that was necessary, and such appropriations as would leave our Board of Health unhampered in the discharge of their functions, the laws would be largely inoperative if lacking in popular sympathy and support; besides many of these things would depend on habits of individuals which legislation could not control. It is to be, then, chiefly a matter of education; and how to accomplish this, is the problem.

If the individual physician in his professional and social contact with his clients sows the seed, if our Boards of Health, local and State, continue and even improve upon their good work, and if our schools from the lowest to the highest teach the rudiments of the science of health, and unfold to the mind

of the pupil the necessity of expert work in the prevention of disease, knowledge must grow. And if our State Society, in its organized capacity, with the courage of its convictions, does not hesitate to urge necessary legislation, they will have discharged their duty, and may soon accomplish much.

Typhoid fever, which is perhaps entirely preventable, causes the State the loss of many a victim and much treasure. Current knowledge or opinion ascribes its propagation almost entirely to intestinal discharges of the infected. Prevention would seem to be in easy reach, yet it goes on. Personal observation leads me to believe that disinfection of the dejections is net accomplished in one half the cases. Many cases of continued fever are not considered typhoid fever, which are most likely of that nature. I will not discuss the subject, but pass it by with the recommendation that the dejections of all fever patients be disinfected. The public should be instructed to do so, even where physicians are not employed, as they often are not, and it may be a fit subject for compulsory legislation. Our Board of Health has done a good service in the matter of prevention of malarial fevers by use of deep well and cistern water. But a properly managed cistern is an exception. Infectious germs are carried from the atmosphere or house-tops to the cistern. Filters, often imperfect, remain unchanged, until oversaturated. They become thus the source of infection. Tuberculosis continues to be propagated by the expectoration of the infected without hindrance, except perhaps in one municipality in the State. from any kind of cow which will afford it. Diseased meats are sold in the markets. Ice is imported from impure sources and people believe that freezing purifies it, which is true only to a limited extent, and may be manufactured from impure water. Any kind of canned food is sold that any one will buy. is no check on adulteration or fraud as to what the people eat or drink or take as medicines, patent or proprietary, save their own unskilled judgment, warped or blinded by alluring advertisements and unblushing false assertions.

The physician often finds that a patient unable to pay him has raked up money enough to pay an exorbitant price for worthless medicines or appliances. Druggists practise medicine. Spectacle venders, ignorant or unscrupulous, still practice this

branch of the medical art, though a medical college graduate has first to pass our State Board. Dangerous drug habits or other evil consequences arise from headache cures and the like. Beverages (coca cola for instance) sold from the soda fountains should be subject to analysis and the people advised, or the sale interdicted if necessary. I refrain from further specific references.

The doctor of the future will probably differ more widely from the one of to-day, than the doctor of to-day differs from the one of the past. We know something of him of the past and present and that the tares have been mixed with the wheat in varying proportions. With prophetic eye we may contemplate him of the future, but we know not how far distant, or how near at hand. The poet or philosopher may by inspiration point the way; the scientist by experimental research may demonstrate; still events occur only in the fulness of time, or that period in the evolution of the human race, under the sovereignty of God, when it is possible to achieve that which before was not attainable, but the sword of the doctor (his weapons of warfare on disease or the diseased) will be changed to the pruning hook, which cuts away the poisonous branches upon which grows the deadly fruit.

In the propagation of the race, in the construction of human habitations, in clothing and in food, in labor and in recreation there is a rational wisdom, and in connection with these there should be skilled advisers. If physic should be thrown to the dogs, will the doctor's occupation be gone? Not when he has proper surveillance over everything that affects the health of people. In his present status of equipment he could do much more than he does or is permitted to do, but when the new order of things creates the demand, medical colleges will not condone ignorance of chemistry and physics even as now imperfectly taught, nor make side shows of the microscope and laboratory. These stones which are well nigh rejected by the builders of medical education will become the heads of the corner. These things will be sine qua non.

North Carolina has been called the Rip Van Winkle of States; still she has been known to arouse from her lethargy. In the matter of legislation regulating the practice of medicine, she was (through the influence of our Society) in the van of the procession. And in this historic city, (Mecklenburg County) May 20th, 1775, she sounded the bugle call as a pioneer of liberty. It is fitting that we should here resolve to push still further the lines of human progress.

ANNUAL ORATION.

TWO SOUTHERN PIONEER HEROES IN SURGERY AND GYNECOLOGY.*

By Albert Anderson, M.D., Wilson, N. C.

Mr. President and Gentlemen of the N. C. Medical Society: ECADE after decade it has been asserted that North Carolina is the Rip Van Winkle State. I deny the charge. Of all places in the world this is the most appropriate to make the denial. We are upon historic ground. It is well to remember to-night that we tread soil of the nativity of American liberty. Upon the soil of old Mecklenburg was born the Declaration of Independence more than fourteen months before that immortal document was produced at Philadelphia. heroes of this county in convention assembled declared in thundering tones those great principles of personal liberty and American independence which have become the foundation and tower of human rights throughout Christendom. In thundering tones, I said, and remember that the roar of thunder is born in the flask of lightening. May 20, 1775, there flashed forth from the immortal soul of Dr. Ephraim Brevard this declaration: "Let us declare our independence and defend it with our mntual honor." This came from a crowd "neither sleepy, hungry nor fatigued."

The seven revolutionary engagements fought within forty miles of this beautiful city vindicated the heroism of this daring deed, and eternally established the right of this place to be called the "Hornets' Nest" of the Revolution. It makes a great difference to the force of any sentence whether there be a man behind it or not. Through every word, every clause, every

sentence of that Mecklenburg Declaration, we meet the eye of the most determined, heroic man. Their force and terror inundate every word; the commas and dashes are alive; the writing is athletic and nimble. It went far—is going to-day—will live forever and travel to the world's remotest bounds. Great patriotic doctor! We honor thee to-night as the chieftest lover of thy country. Thy single eye saw political truth; thy intelligence formulated it, and thy courageous hand penned words embodying our inalienable rights, which are but the transcript from the will of God. Thy patriotism bore the fruits of union, domestic tranquility, justice, liberty and welfare.

Here, too, was the home for a long time of North Carolina's greatest, wisest, purest statesman. Like Ephraim Brevard he died with a single physical eye, typifying the great ruling purpose of his life's work, to serve the best interest of his beloved people. In peace, war or imprisonment, he was first and most loved of all. North Carolina never had any honor too great, any love too precious to give their first citizen and greatest statesman—Zebulon Baird Vance.

There are common traits that mark heroes wherever you find them, under all claims, in every profession. Take the medical or surgical hero. He maintains his equilibrium. He always rides; is not reduced to dismount and walk, because his passions are running off with him in some distant direction. "Calm and serene" amidst the lightning's flash or the thunder's roar, the tumult and uproar of the howling mob, or the terror and excitement of home. After the smoke of battle has cleared away. there is no trouble to the dullest vision in seeing victory flashing "Will he never come?" she cries, an' a' heard the soond o' the horses feet on the road a mile awa' in the frosty air. The doctor comes skelpin into the close, the foam fleeing frae his horse's mouth. Whar is he? wes a' that passed his lips an' in five meenuts he hed him on the feeding board and wes at his work-sic work, neeburs, -but he did it weel. An' ae thing a' thocht ræl thouchfu' o' him, he first sent the laddie's moither toe get a bed ready. It was mighty tae see him come intae the yaird that day, neeburs; the vera look o' him was victory." This William McClure was an ideal type of a hero. We have some in North Carolina. Like McClure they "do their best for the need of every man, woman and child in their wild straggling districts, year in, year out; in the snow, in the heat; in the dark, in the light; without rest or holiday for forty years," and the very sight of them is victory.

Is the physician always brave enough to stand by his patient when the laity see in the form of convulsions the death angel coming with rapid, but sure speed—when the cries come quick and loud for help! help!! help!!! At such times a hero "with a military attitude of soul affirms his ability to cope single handed with the infinite army of enemies" and thereby emulates the example of the great physician when he stepped out upon the turbulent waters and said "peace be still."

There are other foes than external that a doctor must meet and conquer,—those of his own nature. To cope with these he must have a will that says, "Thus far and no tarther." When did you yield to the clamoring demands of a patient for more opium or whiskey? Then it was you who played the part of a coward. Such cowardice in pandering to damning appetites is retroactive and damns the doctor with short patronage, supreme contempt and the habit itself.

"Vice is a monster of so frightful mien, As to be hated, needs but to be seen, But seen too oft, familiar with his face, We first endure, then pity, then embrace."

"Cleave to the right as a ladder that leads up to manhood and God."

Let us not forget results which science teaches. "In the shipwreck only the pilot chooses with science the means of escape, he who comes to land must sail with him." There is a secret impulse in every character. Obey it, tho' the heavens fall and the earth swings from beneath your feet. We ought to know from experience, observation and science the things to touch not, taste not and handle not. Yet in the face of this triple vantage ground, is it a fact that to our numbers we have the largest per cent. of any other class that takes whiskey and morphine as a panacea for our restoration to rest and health? Insomnia comes to our couch; sleep we must have in order to work. If trional is not a sufficient hypnotic, morphine is, and too often the arms of Morpheus enclose us in his sweet but fatal embraces. It is appropriate now to sound this note of duty. Put on the armor

of manhood. Teach by example as well by precept. No man can fill the place of a hero in our ranks who does not check the ordinary evil propensities of his own nature.

Take the father of gynecology,—J. Marion Sims. Test the material out of which he was made. He was patient and persistent. He carried the plans of his powerful mind into minute details, manipulating with that skillful hand to a hair's point, finishing every step as carefully as if he were going to receive a fortune at once. Without encouragement, at one time without friends, without money and without health, the hero worked on till victory was his. The heroic mould of this man will bear the scrutiny of the solar microscope.

"Slave to no secret, who took to private road, But looked through Nature up to Nature's God."

His nature opened a foreground in the medical world, and like the breath of morning landscapes, invited his comrades on. The conditions that met this pioneer have always existed. geons had looked on and declared by their inactivity and nonintereference that it was impossible to remedy the miserable existence. After efforts lasting four years, doing the operation thirty times on one patient, "with palpitating heart and anxious mind, he found on removing the stitches a perfect union of the little fistula." Our hero broke the unbiblical cord that holds so many of us to nature and rose to the platform of pure genius and has ever since received the gratitude of thousands of women restored to health through his discovery and work. peer into the future for some nicke in the temple of fame where his name would be placed, but did his work perfectly, patiently, without reward or hope of reward. Thus it is ever with a "That which a man feels intensely, he struggles to true man. speak out of himself, to see represented before him in visual shape"—with a kind of life and historical reality in it. With Sims it was a most earnest thing to be alive in the world. sion of woman being thrown from her pony furnished him with the opportunity of inventing his speculum. A vista of wonderful possibilities was opened to his inquiring mind. sults giving to woman relief and happiness that thrilled him. "A hero is a hero at all points, in the soul and thought of him first of all." Like truth, tho crushed to earth, he rose after every failure. He did not complain at nature and hold her responsible for his failures. His work, not nature, was considered at fault. Eliminating first one factor and another that prevented his success till the darkest hour came, and like the last hour before dawn-so the dawn soon came to his professional work, and he cried "Eureka." Success followed success till there was no man or surgeon above him in honor or skill. In his trials, failures, successes, honors and fame, we always find him a great soul, loyally submissive, reverent to Him who is above. Had he followed the advice of his brother in law, "to resign the whole subject and give it up" he would not have been the father of gynecology, the founder of the Woman's Hospital in New York, and the recipient of honors and honorariums of kings, queens; emperors, empresses; princes, princesses. When John Hancock signed his name to the Declaration of American Independence, it was said that he wrote his signature in letters so large and so loud that the cry for liberty, which they represented, was heard around the world. With equal truth it has been said that when Marion Sims fell so suddenly into the arms of death, the shock was felt wherever woman suffers or surgery is practised. (Had this been said of Ephraim Brevard instead of John Hancock, it would have been the whole truth.)

When thinking of the daring deeds of heroism in surgery, we naturally and with pleasure turn our thoughts to those accomplished by southern heroes, and for good reasons, because they are unexcelled in skill and ability by men at any other point of the compass. With thrilling delight we mention another hero in the surgical galaxy of the deathless the Father of Ovariotomy, Ephraim McDowell, of Danville, Ky. This fatherhood is 99 years of age next December 13th. The result of this parentage, I should say from the best obtainable statistics, is the addition of over fifty thousand years to the life of woman. Such a tremedous boon to woman comes from inspiration, skill and heroism, He was born not to die to surgery. He is also immortal in the moral and spiritual spheres. Long and faithfully had he studied the possible success of ovariotomy when his first subject came under his professional eye. After a most thorough and critical examination Dr. McDowell informed his patient, a woman of unusual courage and strength of mind, that the only chance for relief was the removal of the diseased mass. He explained to

her with great clearness and fidelity the nature and hazard of the operation. He told her he had never performed it, but that he was ready, if she was willing, to undertake it and to risk his reputation on the issue, saying it was an experiment, but one well worthy of trial. A hero and a heroine had met. Felix to Paul, she listened and was fully persuaded. hung on the recovery of this heroic woman. The mob led by the profession (shame be it said) would have put an end to this heroic life had this woman died. But with confidence in God and in his own ability, he dared to do and if necessary to die to save this woman's life. No anæsthetic to wrap into insensibility the quivering nerves of his subject—"Only a covering thrown over her pallid face to shut from view the flashing of the instruments used. The operation was done, the woman lived. The result was, is, and ever will be, the greatest boon hitherto to woman and an eternal inheritance to surgery.

Just prior to this operation he communed with his God. That prayer of the immortal McDowell was the true index of his nature. His purpose was strong as Gibraltar. His conception of the operation was clear as the noon-day. To relieve suffering by surgical means was an uncontrollable purpose. Do vou suppose for a moment that he considered the effect of the operation upon his success-whether it would enlarge his inflnence among the laity or make his name immortal to the profession? Utility only thrilled him, the relief of a woman moved him to action. "Let a man do his work; the fruit of it is the care of another." Are not all true doctors that live or that have lived, "soldiers of the same army enlisted under heaven's captain and to do battle against the same enemies?" Ephraim McDowell, triple immortal spirit, we hail thee as hero, christian and chiefest surgeon of thy day the world over.

The work and words of these pioneer heroes are the richest fruitage we possess to day. Out of the depths of their souls sprang deeds immortal. To every loyal son of Æsculapius they are brothers.

"On one occasion an orator was contrasting the fame of statesmen, orators and military men, and said he, chief among all these is he who bears the mark of our guild, Ephraim McDowell. For the labors of the statesmen will give away to the pitiless

logic of events, the voice of the orator grew fainter in the coming ages and the deeds of the soldiers eventually find place only in the library of the studeut of military campaigns; while the achievements of the village surgeon, like the widening waves of the sea, shall reach the remotest shores of time." Verily the achievements of these heroes prove the truth of this beautiful These two were rural surgeons. We should take encouragement from the history of these. We, as they did, live away from medical centers in small towns and rural districts. Such places have grown men who have given to the world the most practicable discoveries and advances in surgery, medicine and hygiene. These are too numerous to mention, but they have erected in all ages their monuments, imperishable and "It is said that the ploughman, tilling the fields of the western slope of our continent, who keeps his eyes intently on the furrow, may occasionally find nuggets of gold; so the faithful toiler amidst human ills is liable to unearth jewels of fact, which garnered and recorded, will add to the wealth of surgical knowledge." Sims and McDowell kept their eyes intently upon their work. They recorded only a fraction of their discoveries; yet they kept a sufficient record to render themselves deathless and their facts invaluable. "The spirits of great men, like immortal ships, sail the ocean of time, bearing treasures of the civilization which gave them birth. They outride the fury of all the storms and will sail on till.

"The stars grow old,
The sun grows cold,
And the leaves of the Judgment Book unfold."

"Their day is done; their sun is set. But from the scene of its setting there streams up a trailing brightness—the shining example of those who, while profound in silence, wise in counsel and excellent in skill, were also sincere in piety, true in friend-ship and genial in intercourse. Their presence entered the sick chamber like a sunbeam from heaven streaming into a darkened room. Its mild radiance lingers in hundreds of homes and thousands of hearts. They burn as pure stars fixed in the surgical firmament, at which the great and high of all ages kindle themselves."

SOME REFLECTIONS ON POST-GRADUATE INSTRUC-TION.*

By C. E. Moore, M. D., Wilson, N. C.

T your request I have departed from the usual custom of presenting a paper on some special medical subject and have selected as a topic for my running remarks, "Some reflections on Post Graduate Instruction."

As this was my first visit to the great city of New York where multitudes of rushing humanity throng the crowded avenues and your enquiring eyes meet only the gaze of passing strangers, you can imagine my security of thought and feeling when I realized I had the pleasureable companionship of my colleague Dr. M. and also that of my former classmate Dr. J. pleasant environments of social confreres I was permitted at once to enter the amphi-theatre of medical instruction, and with a sense of personal security, they would assist in eliminating an over dose of the toxines and ptomains of new ideas and assist me in digesting and assimilating only such thought as was conducive to healthy medical growth. Not expecting to become a specialist in the short space of three weeks, but wishing to appropriate whatever good there might be in Zion I took out a general ticket which admitted me to all the departments from which I might gather some facts and ideas serviceable to the practitioner. Perhaps the first thing that impresses one about the city doctor is his personel; his tidy dress, his animated freshness, his physical vigor, his courteous manner and his deliberate positive manhood. You again notice on early stage of your acquaintance his educational qualifications and are at once impressed with the scholastic mind training he has received 'Tis true his habitation and in addition to his medical studies. environments are responsible for this-nevertheless 'tis true, and places him at a decided advantage over his less fortunate col-Who is it could not win position, if blessed with strong physique strengthened by scholastic training and literary attainments, with the best medical advantages at home and abroad with no special thought as to livelihood since poverty and want

^{*}Read before the Medical Society of Wilson, N. C,

are unknown factors in his household? The institutions in New York, for Post Graduate Instruction are well equipped buildings with every convenience and comfort for the student body, and supplied with abundant clinical material that is readily accessible to all who may desire closer investigation. To do effective work in physical diognosis of the eye, ear, nose and throat each student must provide himsel fwith necessary suitable instruments as none of these are furnished there and without them you are denied privileges you would otherwise have.

The great majority of all diseases were regarded as either syphilitic or tubercular and where no history of the former could be had it was classified under the broad head of tuberculor, and treatment directed accordingly. Medicines are not used with the same lavish hand that we dispense them, the dominating idea being constitutional reconstructive agents with good hygiene, and leave the rest to nature. I saw quinine prescribed only one time, that a case of intermittent fever, and the method of administration being somewhat different from ours I give it for your consideration. Fifteen grains bisulph quinine every night at bedtime and Warburg's Tr. every morning before breakfast; give this for 6 days and then give as a tonic,

Fowler's Solution 3 i

Tr. Cinchonadine

Tr. Eucalyptus aa 3

Sig—20 drops 3 times a day.

Just at this point I would remark that my impression is we give too much quinine in our section, that is we are too prone to regard malaria as the fons et erigo of all our disorders and as a result quinine becomes one, if not the chief, component part of our therapeutic remedies. I do not wish to say one word of unkind criticism against the value of quinine in malaria; its utility is recognized and unquestioned, its virtues are known to every creed and nation of civilized people and and its potentive value has builded for itself a monumental fame upon every sea and shore. But it is a question if the idea of malarial complication has not grown upon us, to the exclusion of other maladies which a thorough and scientific investigation would demonstrate. I believe this to be a fact and not a fancy, and while I do admit the great prevalance of malaria in its multiform complications,

yet I also believe it oftentimes serves as the mysterious hiding place of our ignorance or proper appreciation of the true pathological condition. I-noticed with a keen sense of interest their management of diseases of children, their constant aim to provoke a smile from outraged nature, their presistent effort by dietary and hygenic surroundings to so imitate the ways and means of nature that the greater part of the medicinal treatment was reduced to a minimum. But this is nothing new, we all appreciate its truth but are too timid to apply it, fearing unless we keep baby on a goodly supply of mixtures and powders we receive the condemnation of the family or perchance the criticism of the neighboring physician. I suppose you could find doctors (but not in our Society) who would sit by with complacent smile and apparently with an easy conscience as they adminis tered flag-tea, paregoric or soothing syrup and waited for the tardy action of a small dose of castor oil to relieve the agony of a bottle fed baby occasioned by the ingestion of an inordinate quantity of undiluted cow's milk, filling its delicate stomach with undigested casein while a little warm water introduced by means of a stomach tube would remove the materies morbi promptly and the tranquil infant would fall asleep in the mother's arms. And in spite of this the self constituted doctor swears at the thought of the stomach washing and condemns the action as a barbarous practice.

In the field of surgery the universal concensus of opinion, the dominating thought, the paramount central idea in all cases whether minor or major, is perfect cleanliness, thorough asepsis; and their results are so convincing as to exclude the idea of doubt as to the correctness of their method. No case however trival escapes the thoroughness of their technique and it is comforting to observe the satisfactory result, alike pleasing to patient and doctor.

I observed the very limited use of iodoform in wound treatment. Whether this was due to the superiority of other antiseptics or was simply a step toward economy I am unable to say, but the results were satisfactory to the patient and economical to the clincal staff. All suppurating wounds were treated with moist dressings of 2 per cent. carbolic. Any physician can equip his office with the necessary pharaphernalia to treat asep-

tically such cases as would be likely to apply for office treatment at a cost not exceeding five dollars, and his results would pay a handsome interest on the investment and a comforting solace to his own conscience. I sometimes think if we would do less work and do that more thoroughly, we would better maintain our own self esteem and the respect of our clientele, and we would obviate the necessity of encroaching upon our brother practitioners sensibilities or his field of labor, and save ourselves the tedium and annoyance of free practice to advance agents and long tougued grannies, who sing our praises in church yards and chimney corners in a tune and to a meter that is entirely out of harmony with the occasion or the subject. 'Tis brains, not tongues, thoughts, not words that encourage our confidence and inspire our faith.

In the field of gynaecology I received but little inspiration, except perhaps to better familiarize myself with the mode of examination and method of application, and confirming my opinion as to the incurability of many conditions except by resort to radical operation. So far nothing has superseded the tampons of boroglyceride as a local application to the pelvic viscera, or perhaps the addition of a little ichthyol when inflammatory exudation was well marked. In simple vaginitis they use boric acid on absorbent cotton followed by astringent douches. The phylosophy of this is apparent to each of us.

In the department of the eye and ear I saw nothing worthy of mention because at the same hour my attention was directed to the nose and throat with the special view of observing their treatment of catarrhal conditions. Here we had an abundance of clinical material, and to me some very interesting conditions. In private practice I had never observed a deviated septum, but in the clinic the cases were frequently seen and were regarded as a patent factor in producing accute rhinitis. growths were of frequent occurrence and occasional much diffi-Their treatment is removal. These cases culty in breathing. bleed very freely and your first experience will doubtless occasion you some alarm. I saw the operation done with and without an anæsthetic and with either method I would counsel you have none of the family present. Tonsillitis simple and follicular was treated by astringent gargles and the favorite one in the clinic was equal parts of alum, borax and chlorate potash-3 i

to ½ glass water as gargle. While hypertrophied tonsils were removed. Nasal, post nasal and pharyngeal catarrhs were treated by cleansing douches or sprays, the removal of exciting cause and attention to general health by appropriate remedies. brings me to the miscellaneous portion of my paper and I will give such notes and recipes as I think would most interest you. The chloride of ethyle has been supplanted by a more efficient local anaesthetic in what is known as Sleich's mixture which is a combination of hydrochlorate of cocaine and morphine and salt. It can be had in hypodermic tablet form from any of the manufacturing chemists. The point to be observed in the use of this remedy is to inject in the skin at several points and not subcutaneously and we do morphia. Sleich's mixture for general anaesthesia, while warmly advocated by some, has not yet been sufficiently tested to gain rank over Squibb's ether which is used in the greater per cent of cases.

Antiseptic irrigations following operations on joints and abdomen are condemned upon the theory that all antiseptics destroy epithelium instead of protecting it and the treatment suggested is $\frac{6}{10}$ of 1% of salt in sterile water, unless in tubercular disease of joint peroxide of hydragen or bichloride 1 to 5,000 is used. Stiff joint is nearly always the result when we have pus present. Where we have ulceration on the scrotum if the epididymis alone is involved it is tubercular, and if the testicle alone it is syphilis.

Treatment for epididymitis.

Ten per cent. solution nitrate silver, and if that don't cure, put to bed, apply poultice followed by icthyol ointment.

Treatment for orchitis.

Iodide Pot 3 i Tr. Phytolacca 3 vi

Aqua q. s. . . . 3 iii. Sig 3 i every 2 hours.

Put to bed and apply hot flaxseed poultice.

Gonorrhoea is treated by injections of argonin 3% solution, and protargol 1/4 to 1/2 of 1% solution but what seemed the most popular treatment was permanganate of potash 1 to 3,000 by irrigation method. No medicines internally, unless required by complicating conditions.

Local treatment for Boils:

Carbolic Acid .			grs. v. to x.
Fl. ext. Ergot .			3 i to 3 ii
Pulv Amyli			3 ii
Zinci Oxidi			3 i i
Rose Water Ung			ž i
Apply every 12 he	our	s.	

Local treatment for warts and corns, monochlor acetic acid or terchloride of antimony. Adlised not not burn a wart in patient over 40; in such cases better cut it out.

Treatment of ganglion is injection of 5 or 6 drops Churchill's tr. iodine, pressure made after 2 or 3 days. The presence of rice bodies in ganglion indicate that it is tubercular. Hypertrophied scar tissue is cured by injection near the site of 1% watery solution of thiasinamine 3 times a week. Bone fellon should be cut early as necrosis of bone fellon if cut after the 8th day.

Rheumatism in the acute stage is treated with the salicylates and the gubacute or chronic by the addition of iodide of potash as follows:

B.—Solicylic Acid .				3 iii
Bicarb Soda	•			3 ii
Iodide Pot				3 iii
Elix Gaultheria				₹ i
Aqua qs				3 iv
M.—Sig— 3 i t. i. d.				

To determine synovitis of knee joint place hand above the knee and press down and if the joint is normal the patella will lie flat, if synovitis it will be elevated and there will be puffiness. In the first stage patient feels like he has a cushion in the knee. Treat by placing a posterior splint and bandage from toe to knee, skip the knee and go above and bandage then go back to knee and bandage, by this means the knee can be dressed without disturbing the splint. I never use a blister on the knee, but simple counter irritants as the tr. iodine. In hip joint disease in 1st stage use traction and fixation; in the 2nd stage the same; and in the 3rd stage fixation only. The early signs of phthisis are difficulty in movement of the chest walls or lack of motion, high pitched respiratory murmur, dullness on percussion and bronchial breathing. In acute phthisis give

Beechwood Creosote

Tr. Gent. Co. aa. . . 3 ii Whiskey qs. . . . 3 viij

Sig. Teaspoonful in wineglass water or milk an hour after meals, increased 50% every 10 days till tablespoonful is reached.

For emphysema, give

Liq Ammon Annis		₹ ss
Aqua	•	3 vi
Iodide Pot		3 ii
Simple Syrup		Z ii

Sig. ½ to 1 tablespoonful every 2 to 4 hours.

For asthma, pyridine 15 drops by inhalation will give relief in 15 minutes but the objection is its stench; next best is iodide of cthyl 15 to 20 drops by inhalation which will relieve it in 30 minutes. As an internal remedy they use fl. ext. quebracho in hot water.

The cough remedies used as expectoratus were apomorphine and cocillana. Erysipelas by some was treated with 10% ichthyol and by others with pure carbolic acid as mentioned in our previous meeting. Chlorosis or green sickness generally comes on about the third year after beginning of menses, which may be normal, excessive or absent. Takes about six weeks to cure these cases. Give them good food, fresh air and exercise.

B.—Tr. Nux Vom.		3 ss
Dil. Mur. Acid		3 ii
Tr. Gent. Co.		₹ i
Aqua qs		Z iij

Sig. Teaspoonful three times a day before meals, also give a teaspoonful of the following after meals. (Always keep the bowels open with aloes.)

B.—Tr. Ferri Chlor.

Glycerine

Aqua aa . . . 3 i

Sig. — $\frac{7}{3}$ i t.i.d.

Should the iron disagree give Blaud's pills or Gudes Peptamangan. Chorea was treated with ascending doses of arsenic to point of tolerance. Neuritis with strychnia in same manner. In digestive disorders always regulate the diet, ½ of food stuff

peptonized in the stomach and $\frac{3}{3}$ in the intestinal canal. If the stomach is faulty give hydrochloric acid and if the intestinal digestion is faulty improve the oxidizing condition of the system by giving pure creoline and ox bile, with the addition of colocynth or podophyllin if constipation is present.

For acid eructations of flatulency.

Bicarb Soda Magnesia.

Sabgallate Bismuth aa grv. Before meals.

For nervous dyspepsia, give pepsin 5 gr., brom pot. 10 gr., and charcoal 10 grs. in camphor water after meals.

For dilatation of stomach give resorcin 3 gr. bismuth 20 gr. one half hour before meals. In all cases of eczema examine the scalp as seborrhoeic eczema represents 80% of all eczema and causes 92% of all cases of alopecia. Shave the head and apply sulphur 3 i to 3 i oint. or 5% to 10% resorcin in alcohol, apply every night and use no ammonia, as the hair will come out.

Erythematous exzema. Promote diuresis and use as lotion,

Parasitic eczema, ichthyol 10% to 3 i Zinc Aug, or salicylic acid 5% Bal. Peru 10% to 3 i Zinc ung.

Impetigo—Stop all soaps and use only emollient salves.

Psoriasis—Give arsenic internally to point of tolerance and

Pyrogallic Acid 5%
Oil Ricini
Alcohol aa 3 i

Ringworm of the body use white precointment. In ringworm of scalp.

Pyrogallic Acid
Schthyol . . . aa 5
Salicylic Acid . . . 2
Vaseline and Lonoline equal parts

Also sometimes used 2 to 5 gr. bichlor. mercury to 3 i kerosene oil. A difficult condition to cure, lasts from six to twelve months.

Alopecia, carbolic acid, tr. iodine and chloral hydrate, equal parts.

The notes and receipts which I have read are such as I picked up from the different departments and are presented for your consideration rather than your acceptance or endersement, for many of them are new to me and I shall select my cases and judge of their usefulness when I have given them practical test.

In summing up my opinion on post graduate study, I must differ from that of some doctors who for some reason see it in a different light from myself and with cordiality of spirit I give it my hearty endorsement.

It is a refreshing educational shower that stimulates new germs of thought and inspires the old with renewed vigor and life, it expands and broadens because we see and know more clearly; it invigorates and stimulates because it brushes away some of the dusty cobwebs and mirrors some of the advanced thought in medical science. It pays, not only the head but the pocket as well.

Correspondence.

THE PRESENT SITUATION.

Editor N. C. Medical Journal:

In the editorial of the last number of your esteemed JOURNAL I noticed an article which seemed to me to be peculiarly appropriate to the present time, in bringing before the profession the more material—aside from the ethical—part of the daily life, and pointing out the total lack of business sagacity extant, and the improvident thoughtlessness of futurity, financially speaking, among us.

Among one of the first lessons inculcated upon the physician's mind is that the practice of medicine is somehow conducted on a wrong and unsubstantial basis, and that gratitude is an x quantity among patients.

Somewhat later he learns that the world is conducted on a business basis, pure and simple; and that flights of the ideal, and plays of sentiment, are strangely out of place in this the dawn of the twentieth century.

He feels that the code written to guide physicians in their conduct in the remote and chivalric past, is too utopian for the assertive present, and that it needs revision sadly, especially regarding its financial portion.

Still later he sees the utility of having strict business rules, and abiding by them. In other words, he sees the world is opposite of sentimental; that it expects him to follow his business in a business way, and that if he does not do so and makes a financial failure, he only is to blame. Quite logical too, isn't it?

In these modern days the physician is not looked upon as such a paragon, but is valued solely for his skill and knowledge of medicine.

His anxiety, worry, sleepless nights, and sympathy have no market value; they are entirely extraneous to the purpose in view. He is supposed—nay, is commanded to exercise a given degree or amount of skill, for its equivalent in gold. Higher consideration of gratitude etc., for the invaluable work done are utterly ignored: the case well, and the doctor paid—that ends the matter! They feel under no obligation whatever to the physician and have not the least compunction of feeling in discarding him and calling in another doctor in the very next case.

The world forces us to look upon the matter as a business transaction, and forces us to receive it as such—whether we will or not.

Other valuable lessons he learns (or should), in the battle of life; and while comparisons are odious, still he is often found comparing his profession with others in the matters of work, leisure, remuneration, health, pleasure, wealth etc., and usually with detriment to his own.

A great many physicians have a false conception of the practice of medicine; they set themselves up as demi gods, to deal out life and death, to give complete immunity from past errors, and sins committed etc.,—and expect to be regarded as having that prerogative. Their lives are visionary, with no thought of the morrow, or of health, or finances—their self-aggrandizement is reward enough! They are "working for the good of

humanity," they say—yet if you will follow their death lists, the contrary seems more true!

"Working for the good of humanity"!—when they should have sense and foresight enough to work for their own families—to provide for themselves, their wives and children against the days of need and old age; for the old adage says that "he who does not provide for his own family is worse than an infidel." Moreover, brother, who would take it upon himself to provide for your family in case of your demise—would any of your favored patients, or friends?

Just such men are the ones who are ruining the profession to day with their lax business methods—their supposed magnanimity and charity(?). They practice indiscriminately among loafers, and dead-beats—in fact anybody who will send for them, simply for appearances and to say they are "busy," thereby encouraging thriftlessness, idleness and dishonesty. They keep men, by so doing, from paying some honest doctor his dues, and create a large contingent of worthless practice in every community. People have sense enough to know that a doctor cannot spend years of study, and thousands of dollars for education, books, instruments etc., pay his expenses (for, bless you they expect the doctor to pay) and work for nothing! Do they expect it of a lawyer? Do they expect a merchant to give his wares away? Do they expect the minister to endeavor to save souls gratis? No!

Is the doctor then better than all these?—or is he a bigger fool? Whose fault is it that the present state of affairs exists? Does it take occult science to determine?

We have excellent medical laws in this State, perhaps the best in the union regarding the practice of medicine, but what laws have we for the collection of our bills, after the practice? We are not as well off there as the common laborer In all States, and most counties and cities, hospitals, asylums, homes and dispensaries are provided for the worthy indigent, and their officers are paid salaries by the city, county, or State. Yet there are some physicians in this (and I presume in every State) who apparently think this work comes under their jurisdiction, and attempt to do it, when the State does not ask it, and is fully able and capable of caring for her poor.

However to the worthy poor no one will deny service, but imposition is practised in 90% of all cases regarded and treated as such, and it is just that 90% that need looking after with the closest scrutiny.

THE TIME IS PRESENT for the practice of medicine to be placed on a sensible, business basis, and to relegate to hopeless oblivion the chimeras of the past.

Let the people know that you intend to be paid for your work,—tell them how much better service you will be able to give them from hospital, laboratory, and other advantages secured from the proceeds; and that you much prefer idleness to wearing yourself out working for nothing and fostering laziness and dishonesty. If they cannot pay all, make them pay proportionately. They will respect you more, have more faith in your skill, and will soon co-operate with you for mutual benefit.

The fees for some things are rather too high, I think, to be conductive to honesty in payment. Perhaps a little reduction would have a wholesome influence in that particular.

Finally, from all directions comes the tidings that the medical world is awakening from its long lethargy, and that the practice of medicine is destined, ere long, to be placed on scientific, reasonable, and sensible lines.

It behooves us all, therefore, to hasten the day.

J. THOMAS WRIGHT, M. D.

The New York Evening Post of March 26, in a semi-editorial article, shows the following remarkable appreciation of the work and character of physicians: "Their opportunity is unique, but their influence and assistance in the history of our households is a great testimony to the sympathy and patience and large-hearted comprehension of man with and for his fellow man in this urgent, crowded, self-seeking age of ours. Human brother-hood, which has no name or guild, is vitally alive among our doctors. Sleepless nights and anxious days, hours of tense apprehension, the exertion of almost superhuman ingenuity to relieve pain, mark the going to and fro of many a quick-moving buggy' in our streets; and if one in a thousand is so fortunate as to acquire wealth as the result of his practice, let us rejoice for him."—Medical Age.

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Editorial.

TIMELY SUGGESTIONS.

The address of Dr. Francis Duffy, President of the State Medical Society, which was delivered before the Society a few days since, appears in this issue and is well worthy of consideration, not only by the Society as a body but by the individual members. The matter of the earlier meeting of the Board of Examiners has been agitated several times at Society meetings, and we are pleased to note that the suggestion was acted upon this year by the Board. The membership of the Society has been rather on the decrease the past few years, and this is due, in a very great measure, to the fact that the applicants for

license have been unable to join at the time of their examination. We agree with the President in believing that it would be wise to remit the initiation in the case of new licentiates who desire to unite themselves with the Society. They have been at considerable expense, and most of them must regard seriously the expenditure of each dollar. There can be no doubt that quite a number, who would make good members, drift off and never attend a meeting, and feel that they are getting along quite as well without being affiliated with the Society. This is not so, however. The Society needs all the members possible, for each one adds his influence, be it greater or less, to the accomplishment of those objects for which the Society is striving, and these objects attained, redowned to the benefit of all the profession.

The modern tendency on the part of the profession to follow all the therapeutic and surgical fads that are daily arising, is to be greatly depreciated. There seems to be a feeling on the part of Dr. A. that he will not be considered up-to-date if he allows Dr. B. to get ahead of him in the use of some new thing or idea. It would be well to permit these new things to season awhile before adopting them in your practice. They frequently emanate from the brain of some man who is seeking fortune or fame, and a little experience would probably make one content to let them religiously alone. There may be such a thing as too much medication, any way. We should not lose sight of the fact that Nature is the power which cures the patient—it is the physician's part to assist her. The mighty ship, with its human freight, needs the pilot to guide her upon the trackless ocean lest she go astray, but it is the ship and not the pilot that bears the freight to its destination. In disease (generally) it is the physician's part to aid Nature in keeping in the way that leads to recovery, but it is Nature that causes the recovery. We had better learn to say "the patient recovered," not "we cured him."

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Translations and Foreign Reviews.

IN CHARGE OF

RICHARD H. WHITEHEAD, M.D., CHAPEL HILL, N. C.

PERSISTENT VITELLINE (OMPHALO-MESENTERIC) DUCT AND ITS CONSEQUENCES.—In the Deutsch. Med. Woch. No. 7, 1898, W. Korte gives an account of this condition, and narrates a case submitted to operation. As is well-known the vitelline duct, which during early fœtal life, connects the yolk-sack with the small intestine, usually atrophies and disappears so that at birth only very slight remains can be detected in the navel and umbilical cord. Should, however, the duct fail to atrophy, malformations result which are liable to be attended by serious consequences. These may take one of these grades. In the first and most frequent case the origin of the duct from the ileum remains open, and constitutes the so-called diverticulum of Meckel. This presents itself as a blind pouch growing out from the ileum at a point which varies from 15 to 20 inches above the ileo-coecal valve and is composed of all three coats of the gut, serous, muscular, and mucous. There is no means of detecting it in the unopened abdomen. This diverticulum may give rise to dangerous sickness in several ways. Foreign bodies may be impacted therein and lead to perforation. Korte has seen such a case due to cherry stones.

Again, by contracting adhesions with the abdominal wall or surrounding organs, the diverticulum forms a sling under which a loop of intestine may become strangulated. Sometimes a fibrous cord runs from the apex of the diverticulum to the navel, representing the omphalo-mesenteric vessels, and this is very apt to cause intestinal obstruction. Korte has seen four such cases.

In the second grade, remains of the living mucous membrane of the duct are left in the navel which develop tumors—the so-called umbilical teratomata. While in these cases there is no communication between the navel and the intestine, a fibrous band sometimes connects the two, indicating the site of the original duct.

In the third grade, the entire duct persists as a canal composed of all the coats of the intestine running from the navel through the abdominal cavity into the ileum. This condition is usually discovered soon after birth. When the cord drops off a small red, moist swelling, which is generally taken to be a clump of granulations, is noticed in the navel. Soon, however, it is observed that fœcal matter sometimes escapes at this point, and then, introducing a probe, the physician recognizes the presence of a fistulous passage into the intestine. With this condition there are connected dangers of a peculiar sort, the principal one of which is prolapse of intestine. During crying and other muscular efforts of the infant, the duct is imaginated and everted, so

that a long, sausage-like body covered with mucous membrane projects out of the navel, to be usually reduced when the abdomen becomes lax. The prolapse does not consist only of the mucous lining of the duct, as has been supposed, but all of its coats take part in the imagination. Should then, the surgeon cut away the prolapse of its base he would open into the abdominal cavity. As time goes on, the prolapse is increased, and the duct, which we have seen is directly continuous with the ileum, grags that intestine along after it, and finally acute intestinal obstruction is produced. When this stage has been reached all cases, so far as is now known, end fatally. Operation under such circumstances is exceedingly difficult and dangerous, however, such children are from the beginning badly developed, and suffer from intestinal catarrh, and consequently are poor subjects for operation.

There are two other ways in which the persisting vitelline duct may lead to obstructing the bowels. In the first case a knuckle of bowel is pushed into the space between the prolapsed duct and the circumfererence of the navel and there strangulated; while in the second the duct running through the abdominal cavity acts as a cause of strangulation in the manner previously mentioned.

In the way of treatment, cauterization, ligature, and excision have all failed. Even if the mouth of the duct be closed by caustics, the main body of the duct remains open, and prolapse will recur through the sear—on the other hand if we successfully remove the prolapse by ligature or excision—very dangerous to themselves owing to the liability to opening of the abdomen or inclusion of the ileum—the intestine is left adherant to the back of the navel, and the danger of strangulation is as great as before.

In view of the great danger of this condition and the failure of other treatment, Barth suggested excision of the entire abnormal structure including its openings on the navel and into the ileum. Korte reports at length a case successfully operated upon by himself, and mentions seven cases treated in the same way by other surgeons, five of which were cured, two dying.

Review of Current Literature.

PEDIATRICS.

IN CHARGE OF

J. W. P. SMITHWICK, M. D., LAGRANGE, N. C.

A NEW DIAGNOSTIC SIGN OF MEASLES:-Dr. Henry Koplik, (Medical Record, Vol. 53, No 05), describes a new sign, which he claims, is absolutely pathognomonic of the disease. It consists of minute bluish-

white specks, punctate in character, situated in the centre of the reddish areas which cover the mucous membrane of the cheeks and lips in the beginning of the disease. As the exanthem appears and spreads on the skin, the eruption on the mucous membrane of the lips and cheeks becomes diffuse, losing the characters of a discreet eruption, and we have an intense general redness which is simply dusted over by myriads of these bluish-white specks. When the exanthem is at its heigt the buccal eruption begins to fade, and in the latter stages of the fading of the skin eruption the phenomena, described above, entirely disappear. In order to recognize and properly appreciate the above sign the patient must be examined in the strongest day light, and the mucous membrane of the cheek everted so as to expose it thoroughly to the light. Then we see a minute bluish-white spot situated in the centre of the irregular reddish spots which cover the mucous membrane of the cheeks and lips, and doe not occur elsewhere. He says they cannot be mistaken for sprue, as they are not so deeply white, nor are they as large, nor do they coalesce to become plaque-like in form, and they always retain punctate form. The value of this sign seems to lie in the fact that an early diagnosis of measles can be absolutely made, and isolation perfected before exposure is great, and it ought to be sought for by all physicians when they are called to cases that do not admit of an easy J. W. P. S. diagnosis.

A CONTRIBUTION TO THE THERAPEUTICS OF ENURESIS:—An accidental discovery was made in the treatment of this trouble by Dr. Alfred Hand, Jr., (Pediartics, Vol. 5, No 7), He prescribed pills of following composition:

Ext. Cannab. Ind. gr. 1-8

Hyoseyam. gr. 1-400

Zinc. Phosphid. . , gr. 1-10

for the mother who was suffering from nervousness incident to the care of the child. She misunderstood the directions and gave them to her child with the result that the enuresis ceased in two days, and had not returned at the end of six weeks, the time of the writing.

TWIDE

GENERAL SURGERY.

IN CHARGE OF

H. T. BAHNSON, M.D.,

R. L. GIBBON, M.D.,

J. HOWELL WAY, M.D.

TREATMENT OF INGUINAL HERNIA BY INJECTION.—Dr. Theo. Griffin (Int. Jour. Surg.) claims to have produced some very successful cures in the treatment of inguinal hernia by injection. The following

is his method in detail:—I prepare my patient by first seeing that he has a truss that retains the gut perfectly. It must not be allowed to rest within the inguinal canal, but must be held out of it by the pad of a truss that fits firmly over the internal abdominal ring. Having acertained that this is well done, after two or three days' observation, we are now ready to proceed with the injection. I desire to state herethat, in a majority of cases, during the treatment the patient can remove the truss at night, taking it off and putting it on while in a reclining posture, but under no circumstances must the gut be allowed to come down.

The patient now lies down upon the table, and we scrub the parts thoroughly with warm water and soap, dry well, and finally bathe with a 2 per cent solution of bichloride of mercury, cutting the hair short over the seat of the proposed puncture. I now inject hypodermically a 5 per cent solution eucaine, about one-half to the inside and a little below the external abdominal ring. Wait now two or three minutes for the local action of the anesthetic, during which time a syringe is charged with 10 to 15 minims of the injection fluid mentioned in my previous article, or the following which I sometimes use.

B-Fld. ext. quercu alb. . . . 3 iv.
Tinct. cantharides 3 l.
Acid carbolic. m x,

M. Sig.—Inject 10 to 15 minims as directed.—This syringe is furnis 1 ed with a silver probe, known as a cocaine applicator, which can be obtained of any instrument seller, and can be screwed on the syringe in the place of the hypodermic needle. Have this in readiness for the purpose of placing the fluid into and along the inguinal canal. I now take a small trocar and canula—I use one which I found in a veterinary hypodermic case—and plunge it into the tissue at the point where the local anesthetic was injected; direct the point of the trocar towards the external abdominal ring, pushing it up to the ring if possible. Now withdraw the trocar and invaginate the index finger in the loose folds of the scrotum, and push it up to and into the external abdominal ring. As the finger reaches the ring it will come in contact with the canula, which has been left in the tissues. With the free hand guide the point of the canula into the ring, aided by the invaginated finger. As soon as the point of the canula is engaged in the ring, depress the free extremity, bringing the canula almost parallel with Poupart's ligament, and force the canula gently into inguinal canal. It should be passed the full length of the canal, if possible. This being done I take up the syringe with the silver probe attachment, containing the injection fluid, and pass the probe point through the canula to the internal abdominal ring. The point should project a little beyond the end of the canula, so that none of the injected fluid will run back through the canula. Having done this, slowly inject the fluid, at the same time kneading the tissue over the canal with the fingers, gradually withdrawing the canula and syringe point.

In this manner we surely get the fluid where we want it. It is, how

ever, sometimes difficult for me to get into the inguinal canal, but perseverance usually results in success. The external ring is rendered more open and is more accessible by having the leg flexed upon the thigh. There is usually some swelling, but little pain or inconvenience results; so far I have had no abscess or suppuration of any kind. I have been recently informed that two of the cases reported by me have relapsed—case No.4 with an omental hernia, and case No. 5 which at the time of my report I had just discharged from my treatment. Since then I have treated two other cases, the ultimate result of which it is to early too ascertain. The chief difficulty in the way of successful treatment is to get the injection properly into the inguinal canal. this is well done the chances are good for a cure. The unsuccessful results are, no, doubt, in a marjority of cases due to the failure of the operator to do his work properly. Each patient should have at least three or four injections; this is an arbitrary rule, as there is nothing to guide you as to the exact number required.

Motes and Items.

DR. ROSCOE E. FRANKLIN, of Richmond, Virginia, has gone to seek his fortune in the Klondike gold fields.

Dr. W. Clair Spruell has been reappointed resident physician at the University Hospital, Baltimore. A very richly deserved compliment.

BOARD OF EXAMINERS.—There were upwards of eighty applicants before the Board at the Charlotte meeting, just closed. At time of going to press the number of successful applicants had not been determined upon.

The Medical College of Virginia graduated 39 Doctors of Medicine April 21. The following North Carolenians are among the number—Dr. G. A. Caton, Greensboro; Dr. R. B. Miller, Goldsboro; Dr. R. J. Price, Wilmington.

SURGEON-GENERAL VAN REPPEN, of the Navy, has received over three hundred offers from physicians of service as acting assistant surgeons in the Navy. These offers cannot be accepted until Congress authorizes the temporary appointment of acting surgeons. There are about twenty vacancies in the regular service, for which there are few or no applications because of the

humiliating treatment to which newly appointed assistant surgeons are subjected. If Congress will remove these objectioanble features and will authorize the appointment of acting assistant surgeons, there will be no lack of competent men for vacancies.

—Medical Age.

MEDICAL OFFICERS OF THE ARMY.—The House Committee on Military Affairs has made a favorable report on the House bill providing for the increase of the number of medical officers in the army by adding 15 assistant surgeons, with the rank of first lieutenant, and authorizing the surgeon-general of the army, with the approval of the Secretary of War, to appoint as many contract surgeons in emergencies as may be necessary, at not exceeding \$150 per month.—Philadelphia Medical Journal.

ACTING ASSISTANT SURGEONS.—Over eight hundred medical men have offered thir services to the army authorities and more than a thousand to the naval medical department. These are by no means all young men or recent graduates, for many offers are received daily from men, some of whom saw service in the civil war on one side or the other, and others who have come on the stage since that time but who stand in the front rank of the profession.—Medical Record.

CARE OF THE SICK AND WOUNDED. - It has been decided that the naval ambulance ship Solace shall be used as a transport for the sick and wounded of both army and navy. She will carry men physicians disqualified for active service from the fleet or from Cuba to Key West and Tampa. A hospital train will run from Tampa to northern points, in order to give the sick a benfit of a change to the cooler climate of the middle and nor thern Atlantic seaboard. A general army and navy hospital will be established at Key West, and hospital tents will be sent there to accommodate any overflow of incapacitated seamen and soldiers. The selection of Key West for this general hospital is due chiefly to the fact that the island is more healthful than places on the mainland, in the event of a fever outbreak among the men in Cuba or on the warships, the treatment of the stricken there would lessen the danger of a spread of the disease to the coast proper. Other hospitals are to be established in the department of the Gulf, but that at Key West will be the headquarters of the medical corps of both military services, in addition to the Marine Hospital service. — Medical Record.

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Original Communications.

ABDOMINAL ABSCESS.*

· Br Ap. Morgan Vance, M. D., Louisville, Ky.

IVE weeks ago I was called by doctor Henderson of this city to see a young woman who was in an extreme condition; Dr. Cecil also saw her a few minutes afterwards. She was twenty-four years of age, the mother of one child four years old, and had a miscarriage the 29th of last August. pulse at the time of my visit was 150 to the minute, temperature 105° F. Her abdomen was considerably distended, about the size of a seven months pregnancy. Doctor Henderson had seen her in his office four days before; she was then able to walk about the house, and the day I saw her she had been up walking Her bowels had moved as a result of a dose of castor oil the night before. Her pulse at the time of my examination was very feeble. I could get no history at that time of any former trouble, with the exception of the miscarriage referred to, followed by a curettment, which stopped a small amount of hemorrhage that had been going on. I thought at first that the woman probably had a hemorrhage that had gone on to degeneration and formation of a septic clot, and advised an operation.

She was taken to St. Joseph's Infirmary. When the abdomen was opened I came down upon what looked like a gravid uterus; finally in feeling around this glistening, smooth surface, I

^{*}Reported to the Louisville Surgical Society.

entered a cavity of enormous proportions, filled with foul pus. This first wall I struck after entering the peritoneum was inflamed omentum that had become glossy and was closed over in such a way as to simulate a gravid uterus. The intestines and omentum constituted the walls of this enormous sac or abscess cavity. The pelvis could be viewed perfectly, with a great cavity lined with nasty, rotten pus membrane, and off to the left could be seen in the abscess wall a reddish looking body, which was evidently the fimbriated extremity of the tube, greatly enlarged and inflamed; the uterus, bladder and appendages could not be made out.

The cavity was cleansed as best we could with the patient in extremis, and the entire cavity packed with a great amount of gauze, which was brought out through a good sized opening at the lower angle of the wound. The woman has gone on and made a good recovery and is now sitting up. The wound is about closed.

The reason I report the case is that if I had known what it was at first I would have opened the abscess sac per vaginam, but here is a case in which the vaginal operation in view of later developments it would seem would be preferable, yet the patient has recovered by the abdominal method.

After she recovered from the anesthetic she asked me what was the matter with her, and I said she "had a large abscess." "Why," she said, "I had one of those things before and the doctor did not know what it was, until it opened itself and discharged."

There was very little to be discovered by vaginal examination in this case previous to the operation; I could simply feel a great hard mass with an inmovable uterus. It is one of the most remarkable cases of abdominal abscess that I have ever seen recover. There was at least a gallon of pus in the abscess cavity; it extended up above the umblicus, the coils of intestine and the omentum being the walls of the abscess.

Doctor Henderson states that he thinks the woman is tuberculous, but she is gaining flesh and doing well at the present time.

Dr. Louis Frank has reported a case similar to this in which the abscess sac reached above the umbilicus, and thinks now, looking back over the case, that it was probably due to a ruptured appendix following an old appendicitis. Where we have these large abscess sacs, he thinks they can probably be treated to better advantage by opening from above than by draining through the vagina as opened from above such measures may be instituted as will cause an obliteration of the abscess sac; it will close more promptly with far greater safety as far as the future is concerned than if produced through the vagina. It is true such abscess sacs may be tapped through the vagina and will drain to a certain extent, but they usually refill as the sac is not obliterated.

OPERATION FOR HERNIA.*

By W. O. RORERTS, M. D., Professor of Surgery and Clinical Surgery in the University of Louisville, etc., Louisville, Ky.

THIS specimen is simply a large mass of omentum that was removed from a hernial sac today. The patient is a man aged thirty five years, a railroad man by occupation, who has been the subject of hernia for about ten years. He does not know just the exact time. He has never been able to wear a truss.

I saw him two days ago and the hernia was enormous; his scrotum was so greatly distended that his penis was entirely obliterated. Reduction of the hernia was simple, and it felt exactly as though the entire contents of the sac had been reduced. I advised him to have an operation performed for radical cure, notwithstanding the fact I felt that the chances for a radical cure were not good. The opening would admit my four fingers.

An operation was done this morning. Before the sac was opened the contents seemed to all be reduced, but after opening the sac I found considerable portion of the omentum still adherent to it. I think we will find that in many of the cases this condition will exist where to all appearances the hernia is completely reduced. I have seen it occur on a number of occasions in which I have operated for radical cure. I

^{*}Reported to the Louisville Clinical Society.

thought the hernia was all back, then when the sac was opened found some of the omentum still adherent. All of the omentum which I exhibit was not in the sac after reduction of the hernia but I concluded to remove a considerable portion of it so as to lessen the chances of a recurrence of the hernia. After tying off the omentum the sac was pulled out as far as possible, then tied and cut off, and the stump dropped back into the eavity. The opening was closed with chromatized cat gut. I could not do a Bassini operation in this case as the opening was so large; I simply overlapped the aponeurosis so as to-bring the lower portion over the upper.

Just after the operation I operated upon a patient that I befieve doctor Dugan has seen. A man with a popliteal aneurism of the right side. He had a tumor as large as my fist, there was a distinct bruit and pulsation. I ligated the artery just below Scarpu's triangle in the upper extremity of Hunter's canal.

Dr. W. C. Dugan.—I am glad Dr. Roberts brought out the point of adhesion of the omentum to the lower part of the sac in inguinal hernia. I have met with two such cases recently where I had reduced the hernia, and found in doing the operation that the omentum was adherent at the bottom. One was a very large omental hernia, and we found that the adhesions were very peculiar in being at the bottom of the sac, a space not larger than a quarter of a dollar and so thoroughly organized that it required double ligatures before cutting.

The doctor speaks of the size of the opening being against the Bassini operation: I hardly understand the reason for this. I remember one case operated upon in which I could introduce my hand into the ring; the man had been operated upon twice before for radical cure, sloughing ensued and as a result there was a very large opening. We operated upon him over two years ago performing the Bassini operation, and the man writes me that he is entirely well and has had no trouble since the operation although he is a laboring man. I admit it is more difficult than when the parts are normal but it has been my experience that the transversalis and internal oblique can be brought down and sutured to the back part of the ligament.

Dr. W. H. Wathen—I wish to say nothing except in relation to the removal of these large pieces of omentum: In nearly all

the operations for umbilical hernia and for ventral hernia, the forms in which I have had the greatest experience, I find the omentum adherent, and I find further that if it is extensive that it is by all means the best treatment to take away a large portion of it. There is no danger in removal of the omentum if you do the work carefully and use a ligature which is not too tightly drawn, preferably a ligature that will be absorbed, such as cat gut. The omentum, had it been left, would have been more injurious in its effect in bringing about a recurrence of the trouble than all intestines, and without removal the succets of the operation would not have been permanent, but with the removal of it the man's chances have been greatly enhanced for permanent relief, and he may be entirely cured.

Dr. W. O. Roberts—I removed the large portion of omentum for the reasons Dr. Wathen has stated.

Selected Papers.

THE MEDICAL TREATMENT OF APPENDICITIS.

By Elmer Lee, A. M., M. D., Ph.D., New York, N. Y. Presented to the Section on Practice of Medicine at the Forty-ninth Annual Meeting of the American Medical Association, held at Denver, Colo., June 7-10, 1898.

THERE are no new truths, but there may be new phases of that which is old. Progress means the development of new applications through invention and study. Onward and upward is the direction in which the scientific world moves, and no one dares forestall the possibility of discovery in medicine that awaits the higher intelligence. The bases of the unknown triumphs which will be the happy surprise for the future have their preparations in the knowledge and handiwork of the present. The tools increase in delicacy, and number and become more and more adapted to the work of attaining the ideal of crafty man. Methods of using old forces for pleasure or service in the arts and the sciences have greatly changed, and the evolution is for good. The betterment is often a question for doubt by the pessimists, but judged from the standpoint of the uni-

verse, not by the little circle in which one mind operates, the roll of the years brings advantages to each succeeding generation which the preceding did not live to witness. Everything moves toward some new standard or away from an old one. Nowhere is the work of change more clearly revealed than in the duties and privileges of the practice of medicine. Education teaches every man to think for himself; the printing press now puts that thought into imperishable tablets. And what a monster tablet it would require to give a place to all that is said lately on the subject of appendicitis. For one, my belief is that every new thought which is the honest opinion of the mind should be spoken, even if it be but a repetition.

Who among physicians, then, is entitled to speak with authority upon disputed questions, for it is the experience of all of us that we claim the privilege today of corr cting the errorsof vesterday. My plea is for an open mind in the consideration of medical practice. Exclusive surgery desires to assume the responsibility for the treatment of the inflamed appendix, based upon the belief that it is only surgery which possesses the magic of cure. Some physicians think that too much dependence is placed upon surgery, and that it is in many cases a dangerous intrusion without warrant. These two classes are the extremes and it is well to understand the limitations of the question before us. It is sometimes surgical, but more frequently medical, and as general practitioners it is desirable to examine the possibilities for good that are included in the medical treatment o appendicitis.

The cause of appendicitis is seldom if ever exactly determinable, but as a rule, the health of a part depends upon the vigor of the general system. When the symptoms of a localized disturbance in the intestine or appendix reach a point of sufficient importance to require medical counsel, the highest welfare of the patient calls for a conservative method of treatment which will prevent as far as possible the danger of subsequent complications and surgery. A healthy body will not favor an appendicitis, while a safe and rapid return to health, if it is impaired, will either prevent visceral inflammation or be the wisest course in the cure. General measures first and localized afterward, is a broad and effective plan of action in therapeutics.

An immediate, but not the first, cause of appendicitis, is a partial or complete clogging of the circulation in the vessels of the appendix. No satisfactory explanation known to the profession will cover every case. The first determinable effect is congestion, closely followed by exudation of serum and lymph into the mucous and muscular tissues of the appendix and its environment. The exudate stops both venous and lymphatic circulation, which is naturally followed by swelling of the mucosa and other structures of the organ. Whatever particles of fecal matter happen to be within the canal of the appendix at the moment are either passed out into the cecum, or they may be dammed off by a stricture and retained, and in consequence, undergo certain chemic changes. The material may be crystallized by chemic action (the appendolith), or dissolved and reabsorbed, or discharged into the intestine if the swelling of the appendix subsides without destructive inflamination and rupture into intestine or peritoneum. With what is happening, pain is likely to be a prominent symptom at the point affected, yet in some cases pain is absent. But in any case there are enough symptoms from which to safely from a liberal and inclusive treatment of the patient, also broad enough to include the local part.

It is probable that vasomotor control of the artery of the appendix and its branches is temporarily either depressed or exalted, and that there is for this reason too much blood or not enough in the affected part, each of which conditions could be the factor of danger in suitable cases. Inflammation ensues upon congestion, destructive changes take place rapidly under the influence of an increase of heat and chemic decomposition of fluids and tissues, and at this stage the bacterial scavet gers are present to help remove the retrograde products of inflammation. The microbes are regarded as incidents of disease and pathologic change, and serve a further useful purpose in that their presence in excess occasionally confirms diagnosis. They may confirm but not necessarily affirm diagnosis.

The power to create as well as to cure disease resides in the body and never outside of it. At this stage of appendicitis it is purely medical, and if always rightly treated it could not be surgical, save in certain and rare instances. If neglected or improperly managed, secondary changes follow, such as ulcera

tion, sloughing, necrosis and rupture, and even in these conditions spontaneous cure is possible and frequent. But it must be admitted that in such cases the safer course is to employ the assistance of surgery.

As soon as the physician suspects even that there is a possibility of appendicitis, upon first seeing his patient, the safe course is to be on the guard, and by this is meant to treat the patient, rather than the disease, with the view of preventing that which is suspected, or if too late for that, proceed in such manner as to actually give the best chances for a rapid recovery, and thereby provoke the least damage to the abdominal viscera.

In all acute inflammatory diseases of the intestines my experience proves that food should be withheld from the patient for one, two, three or four days. In cases where fever is a prominent symptom, the precise and life-saving course warrants the forbiddance of all food so long as the elevated temperature re-All alimentation, either by mouth or rectum, can be but partially digested and assimilated during the active stage of inflammation. Even that amount of food which is capable of assimilation is in excess of the needs of the system at this stage of the case, and such nutriment as is not completely digested is a further increment of danger, together with other waste matter which forms the material for retrograde chemic action and autinfection. When food is needed a keen hunger will probably indicate it, and at such time moderate feeding is premissible, at regular and long intervals. The hours for meals should be seven, twelve and six o'clock, as nearly as practicable. too frequently given is a general mistake for which there is no iustification. The selection of food is important. A diet of fresh vegetables and prepared sweet fruits stands highest in etfectiveness, besides, it is better relished by the convalescent. Good vegetables are procurable at every season of the year and in almost every locality, and always suitable. The diet need not be exclusive, although a liquid one is freely advocated by some physicians as the best. Nor is it strictly important that meat be omitted, indeed, the diet could be a mixed one if actual hunger is made the guide as to when the feeding should begin. The main point is not to begin alimentation too early, not to give too much or too frequently, and with particular instructions for most thorough mastication. Casciani concludes from experimental studies that:

- 1. In disease or during convalescence, a diet of fresh, well prepared vegetables diminishes urinary toxicity.
- 2. Uninary toxicity is greater where the individual lives on a mixed diet and less where a vegetable diet is adopted.
- 3. A meat diet increases uninary toxicity in direct relation to the quantity consumed.

From the beginning of the treatment, six to eight ounces of fresh, pure water, administered with disciplinary regularity each half hour or each hour for the first, or first and second days of treatment then if the case improves, let the intervals be two hours, is a therapeutic resource of striking simplicity and exact scientific value. The only valid counterindication is the use of discretion in disturbing the patient should he be asleep; none other exists to my knowledge. Internal hydrotherapeutics are coming more and more to be accepted as the line of of investigation upon which a sound basis of treatment is possible. Recently the University of Heidelberg voted this branch of therapy into a full professorship, thereby recognizing the importance of less and less employment of drugs.

It has been observed that a free use of pure water is an effectual laxative, obviating more drastic methods. The laxative effect is aided by dissolving small pinches of common salt in draughts of hot water, given at the regular intervals. Purgation is desirable, but when the intestine is undergoing active inflammation, harsh purgatives are seemingly useful, but actually harmful. This is owing to the irritation excited in the mucous walls of the intestines, and also to the fact that the purgation is at the expense of the constituents of the blood.

The hot saline or soapy enema will free the colon by quickly washing down the fecal contents. The small intestines need no purging, for fermentation and decomposition are generally to be looked for in the ascending and meso colon. Such cleaning of the small intestine as may be useful will naturally follow upon the administration of hot water by the mouth, and from the effect of hydrostatic enteroelysis. It requires two or three quarts of solution to ascend the colon and reach the cecum in an adult and one-half the quantity

Irrigation is best given in the knee-chest position, in a child. though it is immaterial in what position the water enters the colon, so long as the quantity introduced is sufficient to partially distend the bowel all the way up to the cecum. not be able to accomplish this satisfactorily in all patients, or perhaps not at the first trial. But the water can be made to go to the cecum and do its bidding as far as the opening of the appendix, if used with a little patience and perseverence. The colon, free of its contents, is ar important beginning in the management of acute appendicitis as well as in other forms of enteric inflammation. A short rectal tube, four to six inches long, of large caliber is the one now commonly used, the long tubes are no longer generally employed. Water with pressure behind it will find its way more safely and naturally without the use of a special colon tube, which in practice may get no further than the rectum or first fold of the sigmoid flexure.

The oil treatment of appendicitis consists of the substitution of either sweet or olive oil for the plain or medicated water enemas, and to some extent oil is administered by the mouth. The results are said to be highly satisfactory, which no doubt they are, though personally, my experience is limited to a few cases.

It is possible and safe to use morphin and codein for the temporary relief of pain without impairing an incisive diagnosis or the chances for rapid recovery, provided the more important features of the treatment are faithfully and skillfully instituted and continuously maintained. Of this there can be no doubt in acute cases seen at the beginning or at least early. If the practitioner has not sufficient experience with practical hydrotherapy to feel like placing his whole confidence in it, a moderate administration of reputed internal antiseptics will do no great harm if the foregoing hydrotherapy is not neglected. The advantages from prescribing the so-called internal and intestinal antiseptics are based upon belief and can not stand the test of unbiased experiment. Dr. Turck and others have sufficiently demonstrated the truth of this statement for all time to come.

At the last German Congress of Internal Medicine, April

t3, 1898, the address on "Intestinal Antisepsis" and "Autointoxication" proclaimed the parcity of our knowledge on this subject and the worthlessness of all antiseptics for this purpose. They are only kept in vogue by the advertisements of the manufacturers. Only one or two voices were raised in dissent to this timely and sweeping condemnation, which leaves only prompt evacuation of the contents of the stomach and intestines for our reliance in intestinal autointoxication. The German profession has reached this sound conclusion rather late, but still in time to correct an abuse and thereby better serve their patients in the future.

In severe cases of painful appendicitis cold water applied to the affected area of the abdomen is grateful to the patient and helpful in allaying both pain and excessive heat, consequently such applications aid in hastening restitution of the inflamed appendix. My favorite compress is a small napkin saturated with ice water, frequently renewed, with a piece of flannel laid over it as a protective against wetting the bedding. coil and the ice bag, if not too weighty, are convenient and useful. Gentle massage of the abdominal wall contiguous to the appendix is beneficial in cases where the inflammation is not of the fulminating character. Sometimes a cold compress may be advantageously followed by one wrung out of hot water. But where there is excess of local heat with fever, the cold works better, all things considered. The hot poultices of flaxseed and other slimy material confer no important benefit upon the patient; their chief claim for usefulness depends upon an old tradition too sacred to be suspected by the unwise friends of the sick, and unfortunately the medical adviser himself even in some great centers of medical teaching indulges in this ancient but bad practice. Where a hot poultice might benefit one of these cases ninety-nine cases would be injured. the affected area needs no further heating, but on the contrary, the aim should be to arrest the inflammatory process by the cooling and tonic effect of cold water applications. Tonic and stimulating aidance to the nervous system, often badly needed to arouse the bodily vigor and resistance, is assisted by brisk rubs along the spine by the hands dipped in cold water, or with a sponge cooled in ice water. The effect is very frequently a magic influence for which nothing else in therapeutics can be a substitute. The cold shower or spray would be still better if it were convenient, and the patient was disposed to submit, a thing not always to be secured, because of an unnatural fear instilled into the mind against cool water as a remedial agent. Hot water used in the same way would act satisfactorily as a substitute if the objections against the cold water could not be overcome. It is to be remembered that hot water is next in importance to cold in a therapeutic sense, and may in suitable cases to be substituted for it.

Bodily bathing in sickness is today almost uniformly employed; it is therefore but necessary to mention it. If the fever runs high, the greater the importance of speedily lowering it by natural means, and the combined influence of internal and external usage of water in large quantities will more quickly and surely bring about a normal temperature, when safety and permanancy are considered, than is possible with chemicals. If there are those who would use the chemicals, let them not omit a full and thorough application of water therapy and its auxiliaries, such as good nursing, pure atmosphere, sunlight and sunshine freely admitted to the sick-room, together with that most urgent therapeutic measure of total abstinence from food during the first few days of the sickness.

General massage has a place in the treatment of appendicitis, in that it supplies the physical exercise essential for the highest interests of circulation, respiration and digestion. Ample resources are possessed by a body whose vigor is conserved during acute localized inflammations to check destructive tendencies and restore order. In fatal cases it is the disordered state of the system that makes death imminent, and not the appendicitis, for the latter is a symptomatic expression of bodily sickness. Ulceration, sloughing and even necrosis are not necessarily fatal in a body fortified with hydrotherapeutic management.

Rupture sufficient to permit of the escape of fecal products into the peritoneum, according to Morris, would seldom happen if medical treatment from the inception was properly understood and directed. The same author and operator further candidly affirms that medical treatment would save all but a few cases from the need of surgery, if medical practice was inclusive and scientific. But if a choice is to be made between

an up to date, skillful surgeon and an average physician, he decides that the chances of the patient would be better subserved by the former. Under the aggressive teaching of modern surgery, many physicians are apt to lose conrage in the attempt to control the appendicitis, and it is not strange where the sole dependence is placed upon the healing effect of purgatives, opium, poultices and so-called intestinal antiseptics; and in those cases where that mistake of forced feeding at frequent intervals is permitted, together with other errors of medical management, it is quite natural that alarming symptoms should occur leading to a possible surgical crisis requiring an opera-A rupture with escape of fecal filth into the peritoneum is not a pleasant thing, but it would rarely occur, according to the experience of one of the foremost surgeons, if the physician was capable of doing his whole duty properly and at the right moment.

Large abscesses, wherever located, menace health and life, but there are conditions which make the presence of pus less dangerous than an operation would be in an unsuited condition of body. In such cases the physician and surgeon wisely cooperate, thereby justly sharing the esponsibility. An abscess which is reasonably accessible in or through the abdominal wall, the same as elsewhere in the body, is easily opened and drained, but annutation of the appendix for a thickened mucosa or for almost any other reason save rupture, or where there is positive diagnostic certainty that rupture into the peritoneal cavity is imminent, frequently furnishes cases for the surgeon which still rightfully belong to the province of medicine.

Chronic cases should come under a modified plan of treatment based upon the principles herein set forth, and kept within the control of the physician till all the symptoms are long since passed. A healthy colon is the most important salutary factor in every form of appendicitis, for a clean colon is likely to be accompanied by a healthy appendix. If there is a danger of appendicitis or if it has already occurred at some previous date, the successful way to prevent internal and other forms of appendicitis lies within the reach of such an one who happens to have a physician who comprehends, first, the value of regularly cleansing the colon once a week, by the hydrostatic injection of

two to three quarts of blood-warm water. The second great requirement for prevention of recurrence is moderate bodily exercise, performed with daily punctuality. The third is moderation in eating. The fourth is the habitual use of a sufficiency of pure water as a drink to satisfy the requirements of a body that is more than three fourths fluid.

There remains one point more; the experienced and really capable physician is entitled to a fee proportionately important to that which surgery expects, when the equivalent in service is Medical treatment strives to save and prolong human life, and when the result to the patient is the same, whether through the assistance of surgeon or physician, why need the fee be widely different? The fee of \$500 to \$5,000 may or may not be too much for an appendectomy, but if the same end is safely and satisfactorily attained by the practitioner, why should his fee be less than that of his surgical contemporary? When the emoluments for medical work, skillfully and successfully accomplished, whether by surgeon or physician, are relatively similar, there will be an incentive for closer co-operation, higher medical thought and better treatment than prevails in some places at this time. The practitioner is entitled to the full equivalent in exchange for intelligently performed services in the conservation of human life, and that equivalency should correspond to the measure of success in each case treated, with a proper and due regard for the skill, experience and years in medical practice. 10 W. 49th St.

DISCUSSION.

Dr. E. A. Rogers, Denver.—One has no idea how refreshing it is to one who has so long been in the dark to hear a physician offer, with such assurance and confidence, that appendicitis can be treated medicinally with such results as he has stated. I congratulate him upon the successful treatment he has given his patients in this disease. From my standpoint I differ with him; I am in doubt whether absolute medicinal treatment can be relied upon in appendicitis. If any medicinal treatment is good, that which Dr. Lee outlines is the best I have heard. If men would follow more conservative lines many cases that now must be operated upon, sooner or later, would not have to be operated upon.

I find myself diverging from Dr. Lee in regard to the remarks

made early in his paper; his points in regard to etiology are different from those I was taught to believe in. The primary cause of appendicitis I formerly believed to be a mechanical one. The mucous membrane of the intestine is cleansed by an antiseptic fluid which is always present. Here may be found a little defect, and sometimes a little cul de-sac, and here we find a stasis in the normal cleansing process. Now, the organisms which Dr. Lee has mentioned come in and play an important part. Now then, the important point over which surgeons have been fighting comes in—what is the infection which causes the trouble? So soon as that can be determined, and we can state how the infection comes in, then we can lay down definite rules to guide us; then lay down rules as to what are medical cases, what surgical cases, and what cases are best to let alone. Before this time, we are treating appendicitis in the dark.

Yesterday afternoon, in the Section on Anatomy and Surgery, intense interest was given to the discussion which took place on the subject of appendicits; this Section should have discussed this subjet there in the surgical department and the whole topic

studied together.

A great point for us to consider is the nature of the infection. So soon as this infection takes place, swarms of organisms begin their work of destruction. If nature is able to master them, the disease is a trifling one, but if not, death may follow. This point is an all important one, and it is the inability to determine this point that prevents us from forming the rules I just mentioned.

Of course, there are surgeons who claim that this disease is absolutely and entirely a surgical one, but their arguments will not hold. This disease should be treated by the physician and surgeon together. If the surgeon is simply a mechanical one, then Dr. Lee is right in not calling him in the beginning of a case; but a true surgen is one who avoids the knife. A true surgeon is one who knows how and when to use the knife. If Dr. Lee had a surgeon he could trust and rely upon, he should allow him to see the case in the beginning. I do not believe that Dr. Lee can tell in the beginning what course the disease is going to take, and it is only fair that a conscientious and careful surgeon should be called in the case from its very incipiency. I must say in defense of the surgeon, if we trust him, call him early.

Dr. Henry Sewall, Denver.—From personal knowledge on the subject I can agree heartily with what Dr. Lee has said, particularly on the discussion between the physician and the surgeon. I speak from the physician's standpoint. You are called to see a case suffering from symptoms that suggest to you the idea of appendicitis, at least, it presents itself to you in a manner dependent upon subjective data. If the observer believes

pus has formed then no medical treatment; if the observer believes that inflammation is going on to pus formation, then no medical treatment; these are cases for the surgeon. I suppose the common treatment of today is to eliminate functional disturbances which may give rise to symptoms. There is no one here who has not found typical symptoms of appendicitis disappear like magic when the colon was thoroughly emptied; but, if the symptoms are not relieved, then the case calls for the exercise of judgment. It seems to me that the average physician should take a place mid-way between those who urge that every case of appendicitis should be operated upon and those who do not operate upon their patients until almost the time of death. I will only say this, that suppose you let a case of appendicitis go on to recovery—so called—under medical treatment, the treatment the reader of the paper suggested in the body of his work, you expose the patient to certain dan-Not long since I had under my observation a patient who had multiple abscesses of the liver; at the autopsy there was found a cecal abscess. The man disclaimed ever having had symptoms pointing to appendicitis. I believe these cases are quite common; in my experience I have seen four or five of I can not help but think that cases of appendicitis such cases. are to be regarded as cases that belong to sanitarium care.

Dr. Herrick—I have heard the question discussed ably and well from different standpoints; this question was discussed in the surgical Section at great length. The physician and the surgeon are antagonistic in the consideration of this subject, the former dealing with certain phenomena and the surgeon dealing with the facts. I make a point that the physician has

different ground to stand upon than the surgeon.

The gestion has arisen as to the cause of the disease. not all processes of digestion due to the secretion? The intestines and their attendant glands are of the first importance and consequence. If that is so, we way well look to the condition of the secretions. As a matter of fact, we generally find in appendicitis disturbances of the secretory organs. Disturbances of the liver and other disturbances cause changes in the whole portal system; disturbances of the natural secretion cause a disturbance of the colon. As a result of irritation we have congestion of the colon from the impairment of circulation and secretion; a subacute inflammation follows. An impacation of the intestine with fecal matter is then noted. It is this condition of impacation of the colon with arrested secretion that, in all probability, is the cause of appendicitis; at least, it seems to Let us not cut off the appendix; let us not give up me to be so. the idea that we can relieve these patients. Treatment by diet is successful. I have practiced medicine thirty-seven years, and I rarely lose a case of appendicitis. In the last ten or twelve years I have lost but four cases. As to the treatment, one generally applies ice bags. Do not give opium or anodynes. Dr. Baily, Kentucky.—I am a little skeptical about Dr. Lee's promising as much as he claims by the methods mentioned. What has he done in this line? How many cases of appendicitis has he treated by the methods mentioned, and with what success? As a general practitioner, I am bound to say that the diagnosis at the very beginning is the most difficult one to make, and it is at a time when it is most important that we should make it. Realizing the responsibility, I am most willing, as early as I suspect the disease, to call in an intelligent surgeon; I have never called one in where I have had reason to regret it. In the majority of cases the general practitioner should have a consultation with a skilled surgeon. Many of these cases get well without treatment; but the surgeon who can do the operation without mortality ought to give the patient a chance for his life.

Dr. Tyson, Philadelphia.—I have but a few words to say, and in confirmation of what Dr. Baily has already said. I believe that cases of appendicitis are difficult of diagnosis. My experiences lead me to believe that many cases of supposed appendicitis that get well under medical treatment were not cases of appendicitis at all. In cases of appendicitis I want a skilled and competent surgeon, not for operating, but for his judgment. I have had surgeons who have had more experience than I have had; their judgment will help me. If I am satisfied that appendicitis exists, I am willing the appendix should be removed.

Dr. Walker, Philadelphia.—A gentleman, who lived in Philadelphia was seized with appendicitis; I attended him through the attack, and at no time did the surgeon or I think that an operation was desirable. The gentleman desired to leave the city, and he was advised, therefore, as there might be a recurrence of the attack, that it would he better to have an operation performed. The patient was perfectly well, and rode much about the adjacent country, on the street cars, etc., with no temperature or any evidences of trouble. A day was fixed for the operation. At the time of operating, there was found one pint of pus back of the colon, this had given no evidence of its presence or pointed toward any danger to life. To me this was a very interesting case; I thought that the patient was cured of his appendicitis, but he was not. The appendix was swollen and perforated.

During the succeeding year I saw a case that no one would admit the necessity of operating upon. He passed through the attack; later, the surgeon again saw him. He was examined, but there was no evidence of disease whatever. This year, in May, he was taken with symptoms of typhoid fever. I happened to be present in the doctor's office when he mentioned the unpleasant symptoms. The doctor prescribed for him, and he was treated three weeks for typhoid fever. I reminded him of

the previous attacks of appendicitis, and I thought of a pus collection somewhere. A pus sac was found, and the patient is now perfectly well. The pus had been lying there from June to May. This has been a lesson of value to me. Although I believe that the majority of cases are cured by medicinal treatment, still we can not be too careful.

Dr. James, of Missouri.—I have been led to believe that appendicitis was a disease that belonged exclusively to the surgeon, and that the general practitioner had no right to claim any knowledge of the disease. Public sentiment demanded that

the cases be all turned over to the surgeon.

Water is of great value in the treatment of this disease both internally and externally; I also like it used per rectum. I have used the cold applications as described by Dr. Lee and I use it especially if there be high temperature. But, I prefer the hot applications, because, as a rule, the temperature is rarely above 102 F. I have overcome the demand for anodynes. I instruct the nurse to keep up the hot applications even at the expense of rest.

- Dr. H. A. West, Galveston, Texas-1 can not conceive any more important subject in medicine than this. I array myself on the side of many here in combatting the idea that any antagonism between physicians and surgeons exists as mentioned. The responsibility of the physician arises from the fact that he is usually the first to see these cases; they come to him in the first place. The man that assumes the responsibility to himself of treating these cases as medical ones and imagines antagonism as mentioned is assuming a serious responsibility. His first thought should be the care and cure of his patient. So far as medical treatment is concerned, cases that get well recover by themselves. Medical treatment amounts to extremely little. As Dr. Tyson has said, when the diagnosis of appendicitis has been made, I want the advice of an able and experienced surgeon; I want one who has had the opportunity to see many such cases. It seems to me that it is the physician's duty to call to his aid a surgeon. I have seen a patient with a normal temperature and pulse and who was feeling perfectly well, yet a perforated appendix was found; nothing short of an operation would have saved that case. Water given internally, externally or eternally would not have saved such a case.
- Dr. C. F. Ahrer, Fort Madison, Iowa—I desire to say that we are all more or less influenced by our prejudices or peculiar trends. Many men who have a surgical trend or prejudice naturally desire that all diseases may become surgical, and must be treated and men who have a medical trend wish to cure everything with pills and powders. In some cases both these men are wrong. The attitude of surgeons toward physicians in smaller cities and country districts, when the struggle for existence is the prime

factor is not as charitable as it should be, and when we remember, though we are all good fellows, that in many men the hog principle is not yet all rooted out, this attitude coupled with the trend to cut often works infinite mischief to the physician and to his patient. Again, in these districts outside the large surgical centers where honest and competent surgeons can be had without the drawbacks above mentioned the population are not trained to accept surgical interference when needed. In places where good surgeons are to be had, if I had appendicitis I would rather trust a good physician than a bungling incompetent surgeon, for in the former case I might recover, in the latter I must surely die. Were we less fallible and more honorable than we are, we would always do the proper thing, but until then we shall have the same troubles which now beset us. So in appendicitis, as well as other diseases, we are often controlled by circumstances, and under such circumstances we can do only what we honestly and conscientiously believe to be right. If we do this our patients have little to fear.

Dr. Elmer Lee, New York-I recommend the reading of the paper at your homes, because the answers to the questions raised by the gentlemen who have spoken will be found there. I stand before you to plead for the lives of the patients, and in so doing it is my experience after seventeen years of medical practice, that many lives are in jeopardy through the mistakes of the doctor or of the surgeon or of both. I am not an exclusive. I believe the methodical work of the physician is to be considered foremost because he is the one to see the patients first. the physician did his whole duty in the incipiency of the case few cases would go to the surgeon. Recently a child, in Boston, The doctor adminiswas taken sick with pain in the abdomen. tered opium in the night. The next day he came again and gave a purge. The next day he came and continued the treatment. The next day he came and the child was considerably worse for the treatment A surgeon was called—about four or five days after the beginning—and an operation was decided to be neces-The child was operated upon and died. He had been a healthy vigorous boy, but he ate too much candy and food and took but little exercise. The condition which produced the fatal termination I am sure could have been cured by the intelligent application of the lines laid down in the paper. When I find that I am mistaken in my views I will be happy to come to you and acknowledge my mistakes. The physician does not stand equal with the surgeon in these modern days, and a stigma rest upon the medical profession. I am trying to overcome it, It appears to me that and it seems to me it can be overcome. it is within the range of medical treatment to manage the vast majority of inflammations of the abdominal viscera.

I have not paid much attention to statistics. I plead derelict in coming before you without mechanical statistics. I do not

know much about them. If patients do not die that is all sufficient for me. I can not tell if perityphilitis, appendicitis or colitis exists; it is impossible for a physician to verify what was a diagnosis of appendicits; that is only possible for the surgeon who has a machanical result; it can not be done in medicine. It is only my opinion that those cases treated by me have been cases of appendicitis; it may involve the colon or the eccum. I do not know how to make an absolute diagnosis; it may be done in this country and in Europe.—Ir. Am. Med. Asso.

Society Reports.

NEW YORK ACADEMY OF MEDICINE

SECTION IN ORTHOPEDIC SURGERY, Meeting of October 21, 1898.

OBSCURE INJURY OF THE HIP.

- Dr. G. R. Elliot presented a boy two years and eight months old who had fallen from a tree two months before. He complained of the left knee but was able to walk and run. His father reported that the left foot had been dragged with a decided limp and everted to a right angle and that its normal position had been restored after manual traction and manipulation. A slight limp had, however presisted. The left leg was 3% in. short and the left thigh ½ in. atrophied. Gentle manipulation seemed to produce a slight slipping of the joint. The child's ligaments were generally relaxed. He suggested the diagnosis of a dislocated hip reduced at once by manipulation.
- Dr. N. M. Shaffer said that the limbs were practically of the same length and that whatever might have been the lesion there were at this stage no positive signs of hip-disease, dislocation or separation of the epiphysis.
- Dr. A. B. Judson found the trochanter enough above the line to make it probable that there had been a separation of the epiphysis.
- Dr. T. H. Myers said that the limp might be from habit acquired when the hip was painful. The slight shortening in itself would not cause a limp. Irregularity in the length of the limbs had been said to be the rule rather than the exception. The

cause of the shortening was not apparent since a dislocation, when reduced, should not leave any shortening.

Dr. R. A. Sayre had not noticed the presence of marked knock-knee and the father had said that the child had always turned in his toes. In other words he had been unconsciously walking Indian fashion to make his feet more comfortable and to protect the arch of the foot. Beyond this the child appeared to be well.

Dr. P. J. Fiske thought that there might have been a bending of the femoral neck due to the accident or acquired in some other way.

Dr. Elliot said that the head of the bone was in its socket, wherever it might have been immediately after the accident. He thought that the question of separation of the epiphysis remained undecided. He stated that the child had ridden a bicycle frequently since he was taught by his father to ride when he was 18 months old. His greatest distance had been four miles. The boy was 36½ inches in height and his weight was 31 pounds. His bicycle weighed 11 pounds, diameter of wheel 13½ inches, crank 4 inches, wheel base 21½ inches, gear 46. He had ridden without trouble since the accident but the exercise was at once forbidden when the patient was first seen a few days ago. His brother, 4½ years of age began to ride a wheel when three years old. He had a record of a 20 mile run and was in perfect health.

THE USE OF THE BICYCLE BY CHILDREN.

Dr. Myers said that in the case of a child who rode a bicycle great care should be used in the adjustment of the height of the seat and the handle-bar.

Dr. Sayre examined the boy's bicycle and said that the construction of the seat was such that it would compel the patient to appear before the Section on Genito-Urinary Diseases later on. He did not see why a boy of that age should not ride a wheel if he kept off the street. The exercise should not be more than he could stand. Small children sometimes rode ponies and seemed to get along perfectly well.

Dr. Judson said that young children rode tricycles without attracting any special attention. The bicycle furnished ischiatic support. In appropriate cases he advise its use when it was



desirable to combine speedy and agreeable loromotion with relief of the lower extremities from carrying the weight of the body and from the pressure and concussion incident to walking and running. Aside from the risk of accident, he thought that the moderate use of the bicycle at any age would promote normal development and health.

- Dr. R. Whitman thought bicycle riding was a good exercise for knock knees and weak feet.
- Dr. H. L. Taylor strongly disapproved of bicycle riding for young children, not from an orthopædic standpointbut on the ground of its being injurious to the general health.

Dr. Elliot said that children generally assumed bad attitudes on the wheel, leading to faulty development of the thorax. At an early age the bones were soft and the ligaments undeveloped and unfitted to stand the special requirements of riding a bicycle and the result might be, as in the case of the patient, a relaxed ligamentous system. Bicycle riding by children tended to disproportionate development of the legs when compared with the arms. It should not take the place of general exercise which developed the whole body alike.

TRAUMATIC SPINE.

Dr. Fiske exhibited a man 34 years of age who had recovered from injury of the spine with paraplegia and rectal and vesical symptoms. The patient had been presented at the meeting of May 21, 1897. There had been no return of the symptoms and the recovery was now, more than 4 years after the accident, complete. The violence had been extreme, followed by rigidity and pain in the dorso-lumbar region, complete paralysis from the waist down and, incontiner ce of fæces and urine. There had been no crepitus and no deformity. The patient was perfectly helpless. The diagnosis was severe spinal trauma, concussion of the cord, damage to ligamentous structures and probably partial dislocation with spontaneous reduction. Treatment had been by a plaster of Paris jacket worn with occasional renewals for 10 months. There had been no bed-sores. covery with control of sphincters had been complete and the man was aparently in perfect health. In answer to questions Dr. Fiske said that ankle clonus had not been present,

that the lower part of the abdomen had been sensitive but the scrotum, penis and sacrum were anæsthetic, that the sensory paralysis disappeared first, that there had been considerable atrophy of the muscles of the thigh and calf probably from disuse, that the patient had felt nothing give way as he was immediately unconscious and that he began to use his legs in about four months and could walk at the end of seven months. The anæsthesia of the scrotum and penis had led to the opinion that the injury was at the 12th dorsal vertebra and 1st lumbar.

Dr. Eiliott thought that the lesion had not been above the first lumbar. Above that point, which was the end of the cord, there would probably have been destruction of the anterior horn cells with ankle clonus and gre.t localized atrophy. He could hardly conceive of anything less than this happening at a higher level after an injury attended with so much paralysis.

Dr. Shaffer had seen several such cases. The lower the point of injury the better would be the prognosis. The result had certainly been very good in this case where there must have been a partial dislocation or fracture. He recalled the case of a man who was thrown from a vehicle and struck the ground in a sitting position. Rigidity of the spine followed. A certain amount of compression of the anterior column could occur without serious results. If the posterior columns were injured we would get symptoms such as had been present in the patient exhibited.

Dr. Sayre had seen a case similar to the one under consideration. In a railroad accident in which an express car had rolled down a bank, a man had been struck violently by the safe. He was paralyzed from the waist down with no control of the rectum or bladder. This condition lasted some three years. He gradually improved under treatment similar to that described and had been restored to perfect health.

THE LATE DR. PEPPER left an estate estimated to be worth \$1,000,000 to be divided between the widow and three sons. He directed that his body be cremated and his brain given to the American Anthropometric Society.—Ex.

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Editorial.

THE MANAGEMENT OF INFECTIOUS DISEASES IN PRIVATE HOUSES.

Next in importance to the prevention of the first case of infectious disease in a community is the efficient isolation and The health laws of this State and quarantine of such a case. require that all cases of small-pox, cholera, diphtheria, and scarlet fever shall be reported to the Superintendent of Health, and that he shall cause to be placed on the house where the disease occurs a placard, which shall conspicuously give notice of the existence of the disease. It also provides for the proper quarantine of such diseases. In a recent paper bearing upon

this subject Dr. Meigs takes a position opposed to the placard. He says: "There are several reasons why houses should not be placarded and various ways in which placarding is productive of harm. The state of panic created in the public mind is certainly an evil, for it is perfectly well known how difficult it is to deal with frightened people. Probably the greatest harm which comes from the enforcement of placarding is that it greatly increases the number of cases that are concealed. The public and physicians join hands in this practice and it is only what might be expected. Respectable physicians have told me that they never report cases of diphtheria if they can help it, or report them only when they think death is imminent and the risk of detection becomes very great.

"The placarding of houses for contagious disease involves trampling under foot the rights of individuals and such violent intrusion upon family privacy that we ought to pause and ask if we are not in danger of losing one of our precious heritages derived from our English origin, that 'every man's house is his castle'. How much immunity from disease have we obtained in return? The mortality records would seem to indicate that we are less free from typhoid fever and diphtheria in Philadelphia than they are in London where yellow placards are never used, but where there is good sanitary system."

The isolation of patients with infectious disease and those who are in close attendance upon them is absolutely necessary for the prevention of epidemics. Any measure which will assure this object without endangering the health and comfort of those quarantined, cannot be considered a violation of the rights of the individual, and is not objected to by any right minded person. At any rate, the rights of the community at large must have precedence over the individual. Just how much good is accomplished by placarding a house where an infectious disease occurs we do not know. Certainly it is not much, for while it does in fact cause some mothers to avoid that locality when their children are sent out, we do not think that accomplishes much toward preventing a spread of the disease. While a notice of this kind doubtless startles the immediate neighbors when it is first posted, they very soon become accustomed to it and pay but little attention to it, except that it may remind them to send to the house to inquire about the sick child. Children rather regard it with curiosity and go to investigate it, and we have seen them playing on the stoop under the red flag with the greatest unconcern, and even playing with the dog belonging at the infected house, and which had in all probability been to the sick child's bed (during desquamation after scarlet fever, maybe,) to express his sympathy for the sick child.

The isolation of sporadic cases of infectious disease does have a marked influence in the prevention of epidemics, as is evidenced by the report of the Secretary of the Michigan Board However, there must something more be done than the placarding of the house. Tracts, instructing the family in regard to the danger of spreading the disease to other members of the household and to outsiders, and the proper measures to prevent this, should be prevented by the State Bord of Health and placed in the hands of the head of the family and the nurse, by the attending physician preferably. Should the physician see fit to make any change in these instructions to fit a special case, he could make such change in writing, but he should see that such parts as do meet his approval, as necessary to prevent the spread of the disease, are rigidly observed, and the physician should not permit any prejudice he may have against modern ideas of sanitation to overrule the teaching of experienced sanitarians. It requires a considerable amount of moral courage on the part of the physician, at times, to enforce these regulations against the wish of a selfish patient who is careless of the community at large so that he and his family are not put to trouble, but he owes it to himself and the public that the disease does not pass beyond the walls in which he discovered it.

Reviews and Book Potices.

Diseases of the Skin, a compend of. By Jay F. Schamberg, A. B., M. D.; Associate in Skin Diseases, Philadelphia Polyclinic; Dermatologist to the Union Mission Hospital; Quiz-Master in Dermatology, University of Pa. With ninety-nine illustrations. Price, 80 cts. net. P. Blakiston's Son & Co., Philadelphia, 1898.

This little volume treats the subject in a concise and satis-

factory menner. Duhring's classification has been followed in the main. Special attention has been given to differential diagnosis and treatment, and the work will be found very useful to the student and the general practitioner for review and ready reference.

The Physician's Visiting List.—Forty-eighth Year of Publication. P. Blakiston's Son & Co., Philadelphia.

This most excellent visiting list for 1899 has made its appearance and is fully up to its usual mark of excellence. The usual tables and blank pages for memoranda are to be found this year. The prices for the various styles rule the same as in previous years, viz., \$1 for the 25 patients a-week size; \$1.25 for 50 patients; \$2 for 50 patients, two volumes; \$2 for 75 patients, two volumes; \$2.25 for one hundred patients, two volumes; \$1.25 for the perpetual edition for 1,300 names; \$1.50 for 2,000 names. We hope that those of our readers who secure this excellent list will fill every page and collect every dollar they book.

Practical Diagnosis.—The Use of Symptoms in the Diagnosis of Disease. By Hobart Amory Hare, M. D., B. Sc., Professor of Therapeutics in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; Laureat of the Medical Society of London, of the Royal Academy of Medicine in Belgium, etc.; etc. Third edition, enlarged and revised. Royal octavo, cloth, Pp. 624. Lea Brothers & Co., Philadelphia and New York. 1898.

It is seldom that a book goes through several editions so rapidly as this has done, the three editions having succeeded each other at intervals of only twelve months. This is not to be wondered at, however, in view of the author's reputation in this country and abroad as a diagnostician and therapeutist. The opportunity has been utilized to rewrite portions of the work and add new illustrations so that the volume contains some fifty pages more than the first volume. It is intended as a companion volume to the author's work on Practical Therapeutics. with the seventh edition of which it is published simultaneously. Part I. studies the various diseases as they are manifested in different portions and organs of the body, while Part II. treats of subjective symptoms and the conditions which may give rise to them. We can heartily recommend this volume to all general practitioners as one that will richly repay reading, and rereading, and one for which they will find daily use.

Review of Current Literature.

PEDIATRICS.

IN CHARGE OF

J. W. P. SMITHWICK, M. D., LAGRANGE, N. C.

THE TREATMENT OF INCONTINENCE OF URINE IN CHILDREN WITH RHUS AROMATIC.-Dr. Ludwig Freyberger makes use of a fluid extract of the fragrant sumach of America. This was first used in the treatment of incontinence of urine caused by an atonic state of the bladder. Burvenich believed that it was a powerful tonic for the bladder, acting similarly to nux vomica. According to Numa, it stimulates the unstriped muscle of the bladder as well as that of the uterus and rectum. During the past three years one hundred and ten instances of enuresis have been under observation. Leaving out those in which the symptom was due to phimosis, preputial adhesions, hypospadia, urinary hyperacidity, cystitis, nephritis, or glycosuria, there remained altogether sixty instances of the use of this drug. Of these, thirty are tabulated, because a sufficiently long time has elapsed since their discharge (nine months to two years) to enable an opinion to be given as to a permanent cure. Patients who had previously received belladonna. strichnine, or tonics without success were at once put upon this treatment: Others underwent a preparatory treatment, which consisted of regulation of the diet, sleeping upon a hard mattress, the use of light coverings, and cold sponging along the spine. The children were taken up once or twice during the night and made to pass water. The formula is: Fluid extract of rhus aromatica, 1; aromatic syrup, 2; distilled water, 6, which conceals the astringent taste and disagreeable odor. The dose varies from five to ten minims (two to five years); ten to fifteen minims (five to ten years), with a maximum of twenty minims for older children. Of the thirty instances recorded, twelve boys and eighteen girls, cure followed in eighteen, eleven boys and seven girls; improvement in ten, one boy and nine girls; and no improvement in two girls. "Cure" is intended to mean that at least nine months have elapsed since enuresis has occurred for the last time. The average duration of treatment was thirty-four days in boys and forty-five in girls. Thirty-three days, on an average, were sufficient to produce a permanent cure, fifty-three to effect a permanent improvement. It would be rash to claim this remedy as a specific, but it certainly appears to be as efficacious as belladonna, may be given for a long time without the slightest ill effect, and good results may be obtained when the latter proves ineffective.—Treatment, 1898, No. 5, p. 129. Am. Jr. Med. Sci.

GENERAL SURGERY.

IN CHARGE OF

H. T. BAHNSON, M. D.,

R. L. GIBBON, M. D.,

). Howell Way, M. D.

THE TREATMENT OF HEMORRHOIDS .- Dr. Coston (Medical and Surgical Reporter) gives these points in favor of the clamp and cautery: 1. In the operation with the ligature you tie up the most sensitive of all nerve ends, and there is intense pain, which will be kept up until the stump sloughs and the ligature comes off. In the cautery operation the nerve end is simply cut away and cauterized, and there is nothing left for it to do but cicatrize, and it is left in the very best possible condition for this. 2. The ligature may slip off and the secondary hemorrhage occur; after the clamp-and-cautery operation there is no danger of secondary hemorrhage. If hemorrhage occurs, it does so immediately, and the operator can blame only himself for it. 3. There is no danger of a recurrence. Kelsey, of New York, and Smith, of London, who have a large experience with operations, support this statement. It will be admitted that recurreces do follow the ligature operation. 4. Convalescence is much more quickly completed, for the reason that it begins at once under the eschar produced by the cautery, and would be completed by the time the ligature came away should the two operations be used on separate tumors in the same case 5. The mortality following the clamp-and-cautery operation is practically nil. 6. The clamp-and-cautery operation requires less after-care from the operation. 7. There are no unpleasant sequelæ.—Canadian Practitioner.

"THE IGNORANCE OF SURGEONS REGARDING FRACTURE OF THE LOWER END OF THE RADIUS."-At a recent meeting of the College of Physicians of Philadelphia, Dr. John B. Roberts (Phil. Med. Jour) read a paper with this title. He said that his attention was called to this subject by a paper recently published in a New York journal, in which the statement was made that fracture of the lower end of the radius is often accompanied by transverse fracture of the lower end of the ulna. The skiagraphs which accompanied the article, together with the age of the patients in whom the injury occurred, showed that the condition was simply an ununited epiphysis of the lower end of the ulna. In another case, in which he was called in, a pad had been applied before the fragments had been thoroughly reduced. Dr. Roberts believes that fractures of the lower end of the radius are among the most easily and satisfactorily treated; that there should be but little pain or discomfort after the first 24 hours; and that there should be slight stiffness after the first week of treatment; deformity should be so slight as to make it unnoticeable, unless the fracture is comminuted; and sufficient force

should be used to break up impaction, in some cases, under anesthesia. Eight cases were shown, in which excellent results had been obtained. The dressing applied is of little importance, provided the fracture is properly reduced. A band of adhesive plaster, wound several times around the wrist, is quite sufficient in many cases, or a posterior splint, a Levis splint, or a plaster-of-Paris bandage, may be applied. Dr. Hopkins believes that some form of apparatus to hold the limb at absolute rest is desirable for a time. Dr Wharton agrees as to the importance of reduction, but does not find it always easily accomplished. and an anesthetic is often necessary. In spite of the greatest care, there may be much discomfort for several weeks, and even after complete reduction, disordered function sometimes follows. Dr. W. J. Taylor mentioned the case of a boy of 17, in whom the skiagraph showed the reduction of the fracture to be perfect, but a certain amount of displacement was found to have occurred after putting the arm up on a splint. Dr. Hearn does not find it easy to reduce the fractures, and believes that an anesthetic should be used in most cases. Dr. Mears compared the methods of treatment in use 25 years ago, when, in many case, the arms was put up on a band without reduction, with those of the present time. Dr. Davis believes that the line of fracture is usually oblique from above downward, this making it impossible to reduce it by pressure from above. Dr. Roberts, in closing, stated that if the fracture were comminuted it could not be easily retained in position. otherwise there would be no difficulty. The adhesive plaster would, of course, not be used in case there was swelling in the arm.

PATHOLOGY.

IN CHARGE OF ALBERT ANDERSON, M. D., WILSON, N. C.

ON NEISSER'S DIAGNOSTIC STAIN FOR THE DIPHTHERITIC BACILLUS.—The following abstract of a paper on this subject by R. T. Hewlett, M. D., appears in the British Medical Journal (Sept. 3, 1898). The formula is:

- (1) One gramme of methylene blue (Grubler's) is di ssolved in 20 c.cm of alcohol (96 per cent.) and mixed with 950 c.cm. of distilled water and 50 c.cm. of glacial acetic acid.
- (2) Two grammes of benzoin are dissolved in 1,000 c.cm. of boiling distilled water, and the solution is filtered.

Cover-glass specimens prepared from fresh serum cultures and stained in No. 1 for 1 to 3 seconds, rinsed in water, counter-stained in No. 2 for 3 to 5 seconds, washed in water, dried and mounted in Canada balsam.

So treated, the diphtheria bacillus appears as a slender, longish rod, stained brown and generally containing granules of a deep blue or inky tint. There are generally two granules, situated at the poles, occasionally a third at the middle of the rod. The method has been tested on about 50 cultures from diphtherial throats, and the characteristic appearances have been obtained in every case. The pseudo-diphtheria bacillus of Hoffman does not give the granulation. A slightly longer treatment than that recommended by Neisser has seemed to yield better results—namely, five seconds in the blue and ten seconds in the brown

An attempt has been made to extend the method to swabbings or membrane from the throat. With swabbings the results were not very successful, an error of about 14 per cent. occurring in 30 cases.

With fresh membrane, care being taken to avoid fallacy from the presence of fragments of leptothrix and diplococci, which may simulate the diphtheria bacillus, Neisser's method often affords a rapid means of positive diagnosis. If a negative result be obtained recourse must be had to culture methods.—Canadian Practitioner.

PRACTICE OF MEDICINE.

IN CHARGE OF

S. WESTRY BATTLE, M.D., U. S. N., ASHEVILLE, N. C.

PERICARDITIC PSEUDO-CIRRHOSIS OF THE LIVER .-- Although the accuracy of the clinical picture of this disease given by Pick (see The American Journal of the Medical Sciences, August, 1896) has been confirmed by various observers, the explanation of the ascites, given by him, has been denied by some. So Heidmann thinks the ascites is due to peritonitis, although the probability of this view was early denied by Pick. Nachod (Prager med. Wochenschrift, 1898, No. 26) was able to throw an important light on the question by reason of a laparotomy made on a patient in the early stage of the disease. The symptoms began with pain and swelling in the joints, following cold. Later, dyspnœa, palpitation, headache, and dizziness appeared. Œdema of the feet was followed by ascites, and the cedema then subsided. The heart was enlarged in all directions, the apex beat feeble, the first sound at the base double, the second pulmonary accentuated. The liver was enlarged; there was ascites; the splenic dulness enlarged. No albuminuria. An exact diagnosis was not made; the heart was looked on as the organ first affected. After two months the ascites had increased so much that some operative treatment was necessary, and laparotomy was performed. An incision was made for umbilicus to symphysis. The peritoneum was perfectly healthy; there were no adhesions. Five litres of yellow fluid were evacuated. The liver was enlarged, extending a hand's-breadth beyond the ribs; the edge was thickened, smooth,

hard, and cyanotic. The spleen felt normal. Improvement was only temporary. Puncture was necessary five times, and nine months after operation the patient died. Autopsy showed tuberculosis or the serous membranes; fibrinous pericarditis, with extensive adhesions; cardiac cirrhosis of the liver. Had it not been for the laparotomy it might have been thought the case was one of serous membrane tuberculosis from the beginning, and, in fact, the description of the alterations is not sufficiently clear to enable the reader to exclude a tuberculous origin for the whole case. The author, however, holds a different opinion, although he admits the impossibility of explaning why it is that pericardial adhesions are followed in some cases by the changes found. Still, as Pick pointed out, other diseases of the heart show a great irregularity in the associated changes.—Am. Jour. Med. Sci.

MISCELLANEOUS.

ERYTHEMA ENEMATOGENES.—At a recent meeting of the Clinical Society of London, Dr. G. F. Still read a paper on a rash in children due to enemas, of which, he pointed out, few cases have as yet been recorded, and that while the affection is of itself of little moment, it is of importance because it may be mistaken for some of the specific exanthems of children. As indicated by 26 cases which have been studied, the rash has a characteristic appearance and course. There seems to be no reason to doubt the causal relation of the enema to the rash. In some children repetition of the enema was followed repeatedly by the rash. Usually a bright red, patchy erythema appears, especially on the front of the knees, the backs of the elbows, the buttocks, and the face; in some cases, however, the rash is scarlatiniform, or the two forms combined. It appears most often from 12 to 24 hours after enema and lasts usually from 24 to 48 hours; there is rarely, if ever, any constitutional disturbance; the amount and time of retention of the enema and the duration of the preceding constipation do not seem to affect its occurrence. The rash occurs most commonly after a first enema, and is more prone to develop in children over 6 years of age than in younger ones. Scarlet fever, rotheln, and measles are the exanthems for which an enema-rash is most likely to be mistaken. The absence of constitutional symptoms, of sore throat, coryza, and pyrexia, and often slight differences in the character and distribution of the rash, together with its appearance just after an enema, may serve to differentiate the enemarash. The differentiation from scarlet fever is sometimes rendered difficult by the fact that desquamation may occasionally follow an enema-rash. It is thought that a certain number of cases of so-called "surgical scarlet fever" may be the result of an enema given before the operation. This enema-rash is regarded as the result of vasomotor dilatation, but the manner of its production is uncertrin. Three possible explanations suggest themselves: (1) Absorption of some toxic substance from the soap of the enema, possibly from the fats or the resins used; (2) absorption of some fecal toxin, thrown into solution by the enema; (3) a reflex effect on the vasomotor centers. While arguments might be adduced in support of each supposition, it is deemed most reasonable to regard the rash as dependent upon the absorption from the intestine of some constituent of the feces or the enema, including vasomotor disturbances.—Philadelphia Medical Journal.

Poisoning by Bichloride of Mercury.—Dr. H. G. Monk (Medical Register) reports an interesting case of poisoning by the ingestion of seven and a half grains of bichloride of mercury. He saw the patient three hours after the drug was taken. He was suffering from pain in the gastric region, and a scalding, burning sensation in the mouth and throat, and was making vain efforts to vomit. Pulse was very weak and thready, and the face presented a peculiar pinched, anxious expression. Administered the whites of two eggs, and large draughts of warm water and ipecac were soon followed by free vomiting. This treatment was repeated two or three times, after which the patient was allowed to take a nap. He awoke feeling much better, and was then ordered thirty grains of subnitrate of bismuth three times daily. He made a complete recovery with no remaining disturbance of the stomach.

Therapeutic bints.

FOR VESICULAR ECZEMA OF SCROTUM.—According to Wittzack it is not advisable to use a powder, since when mixed with the secretion from the affected surface it cakes and falls off. The application of compresses wet with an astringent solution is recommended, as for instance:

Ŗ	Aluminii acetat	3 v
	Liq. plumbi subacetat	3 ss— 3 iiss
	Aquæ	ž iii.
1	Sign Freeze use	-

If the epithelium is gone it is best to employ a mixture of 1 to 2 parts of white precipitate ointment with Lassar paste. It will often be found helpful to cauterize by means of a solution (10 to 50 per cent.) of caustic potash applied on a cotton tampon; the caustic is then washed off and the part covered by Lassar paste. Or nitrate of silver (a 10 or 20 per cent, solution) may be chosen.—Medical News.

For F	LATULENCE IN CHILDREN.—
R.	Sodii sulphocarb gr. iv—viii
	Syr. aurantii
	Aq. menthæ pip q. s. ad. $\frac{\pi}{3}$ i.
	M. Sig. One teaspoonful three times a day for two
days.—F	

Motes and Items.

NEW YORK OPHTHALMOLOGISTS are rebellious over the appointment of a Philadelphia ophthalmologist as consultant to the Craig Colony of Epileptics, a state institution situated at Sonea, N. Y.

Time when Death Most Frequently Occurs.—It has been the impression that death occurs most frequently in the early morning hours, and with the idea that the vitality of a patient was lowest at that time, it is a well followed custom to use stimulants then especially. However, Professor Raseri, in the British Medical Journal, from a study of over 25,000 deaths finds that deaths occur more frequently between the hours of 2 and 7 in the afternoon, and that it is births that happen most frequently in the early morning hours.

THAT FOOL PRINTER.—The Editor very greatly regrets the blunder made in the last issue by the crazy printer, who, after the proof was read, transposed portions of the editorial on "Chief Surgeon George Gillett Thomas" and the review of Dr. Massey's excellent work on "Conservative Gynecology and Electro Therapeutics." We do not know whether to attribute his condition to the recent election or an unusually large supply of Wilkes County Corn; but we sincerely regret it. It caused a greater shock than that sometimes caused by the linotype work in the daily papers; and reminds us of the blunder made by a printer who tacked on to the first part of the notice of a beautiful wedding the latter part of a description of a dog fight.

"Posed as a Doctor to Wed a Pretty Girl:"—This is the line-heading of a pathetic story in one of the daily papers. The

wooer won and wed the maid. After marriage everything went on happily until the bride learned her husband was not a doctor. Then life was not "all one grand sweet song", in short a separation resulted. He may have been a good husband in other respects; but he was not what she had marrted him for—a doctor. The story further tells that this pseudo-doctor "had money." Who could blame the lady? Beats there the feminine heart which would not s eccumb to a combination so rare as a doctor with money?—Medical News.

CREMATE THE DEAD.—The dead of London require an annual waste of twenty-three acres of valuable ground. If 4,000 corpses are crowded into the space of one acre, the limit in the case of the most populated graveyard, and if we accept the present rate of inortality, 20 per 1,000 inhabitants, as the standard, New York, with a population of 3,500,000, would have to provide room for 70,000 corpses, and would require annually seventeen and one-half acres to bury them in. Unless the custom is changed the available room in the vicinity of all large cities will gradually be absorbed by remains of the dead—Medical Age.

MUD THROWING BY THE BESMIRCHED. -The disgraced Behring, whose desperate efforts to trade in intant lives have been repudiated even by his own countrymen, now seeks to defend his misdeeds by the impudent assertion that earlier medical discoverers and inventors only lacked the opportunity to equal himself in depravity. A writer in the Berliner Tageblatt, having asked what would have become of the ophthalmoscope if Helmholtz had made a claim to patent his invention, or what would have become of the methods of immunization devised by Pasteur, or of the antiseptic dressings introduced by Lord Lister, if these gentlemen had acted like Behring, the latter replied that Helmholtz of course could not have attempted to patent the ophthalmoscope as there were no patent laws at that time, and that what Pasteur and Lord Lister would have done, supposing that it had been possible for them to obtain a patent for their discoveries, he did not know, but he implied that from what he knew of these scientists they would have made money out of their discoveries if they could. This ingenious gentleman forgets to mention, however, that even if the two dead men, whose

memory he traduces, and the living one, whom he insults, had stooped ever so low, they could not have fallen to the depths of 'lifting' the discoveries of others and attempting to sell them as their own.—Medical Record.

An Object Lesson for Spanish Sanitarians.—Gen. Leonard Wood, governor of the military department of Santiago, Cuba, authorizes the statement that there has not been a case of yellow fever in the city of Santiago during the last sixty days, and that the ordinary sickness during the same period has been ninety per cent. less than usual. In the mean while, Havana, still under the control of Spanish officials, is reeking with filth and rotten with disease. The Spanish commander is furious against what he calls the "Anglo Saxon canaille," because the English railway superintendent complained that the Spanish troops used the floor of the station waiting-room as a public urinal. Such squeamishness seems to him to be really too absurd.—Med. Rèc.

Reading Potices.

DR. N. ALLEN HEATON, Washington, D. C., writes "S. & D's aseptic syringe had been adopted by the surgeons of the New York Hospital. It is far superior to any upon the market, and will do more to assist and advance Hypodermatic Medication than any single improvement of which I am at present aware."

In Laryngeal or Winter Coughs.—Dr. Walter M. Fleming (Journal of Nervous and Mental Disease) says, that ir acute attacks of laryngeal or winter cough, tickling and irritability of larynx, Antikamnia and Codeine Tablets are exceedingly trustworthy. If the irritation or spasm prevails at night the patient should take a five grain tablet, containing 43/4 gr. Antikamnia and 1/4 gr. Sulphate Codeine, an hour before retiring and repeat it hourly until the irritation is allayed. Allow the tablet to dissolve slowly in the mouth swallowing the saliva. After taking the second or third tablet the cough is usually under control, at least for that paroxism and for the night. Should the irritation prevail in the morning or at midday, the same course of administration should be observed until subdued. In neuralgia, in short, for the multitude of nervous ailments, he doubts if there is another remedial agent so reliable, serviceable and satisfactory, and this, without establishing an exaction, requirement, or habit in the system, as morphine does.—The New York Medical Journal.

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Original Communications.

THE OPERATIVE TREATMENT OF ENLARGED PROSTATE.

By H. Horance Grant, M. D., Professor of Surgery in the Hospital College of Medicine, etc, Louisville, Kentucky.

Stenographically Reported and Condensed for this Journal, by C. C. Mapes, Louisville, Ky.

N A paper read before the Louisville Surgical Society the author said it was contemplated to review the operative treatment of enlarged prostate; as such treatment cannot be routine, but must apply to different forms of enlargement, an intelligent idea cannot be obtained except by reviewing also the pathology and diagnosis.

We may regard prostatic enlargement in its chronic form as: First—Inflammatory. Second—Fibrous. Third—Adenomatous. Fourth—Cystic, and Fifth—Malignant.

Chronic parenchymatous, Gouley says, is the most common form of old man's prostate, often large, with calcareous formations in the acini-not a hypertrophy—no new tissues being added; simply a hyperlasia of the virginal tissue. It is rarely seeen before the fi'ty fifth year, almost never before fifty years, occurs in something like forty per cent. of men over fifty, but produces important symptoms in only about eight per cent. of the latter. Gouley thinks the condition largely gouty, of slow development, progressive; a mild, subacute, inflammatory process at the outset; symptoms once established tend to increase in severity by auto irritation.

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The prostate thus diseased may assume large proportions; in one case seen by me it was found on post mertem to be the size of a small cocoanut, and to have occluded both ureters by advance on the thickened walls of the bladder.

Fibrous tomors are rare, unusually seen earlier than the inflammatory form, and less commonly produce symptoms unless they take on malignat degeneration.

The same is true of adenoma.

Cysts of the prostate are rare, though retention cysts of the ducts or of the acini are reported, and the same is true of hydatid cysts.

Malignant growths are uncommon, but may be either sarcomatous or carcinomatous, primary or secondary.

The differential diagnosis is difficult. When prostatic enlargement exists in such degree as to require treatment, malignancy must be excluded before operative interference applies. Pain, rapid increase in size, with cachexia, soon establish the diagnosis, though it happens at times neglect of the patient puts him in such a serious condition on first examination that the history cannot clear up satisfactorily all questions.

Harrison refers to carcinoma as by no means so uncommon as to be left out of calculation. He has seen little hemorrhage or ulceration in carcinoma of the prostate, but usually distressing urinary symptoms with pain radiating down the thighs and up the back. He thinks malignant disease is usually seen before fifty years.

The other varieties are hardly to be differentiated positively, but are to be suspected in cases giving trouble before fifty years.

These points being carefully considered, the question arises what comes before any operation in the way of palliation? Most recent writers upon the subject advise systematic catheterization until this becomes too difficult or intractable cystitis, with all its attendants, makes something further imperative.

Operative procedures seem to include as practicable and

promising, the following:

First—Internal prostatectomy by Mercier's instrument. Second—Suprapubic section and prostatectomy. Third—Perineal enucleation, combined with suprapubic section. Fourth—Castration, and Fifth—Vasectomy. Other methods of operation, and various modifications of those mentioned are left out of consideration.

First. Internal prostatectomy in any concealed way is so unsatisfactory and dangerous, without taking into account its rare suitability, that it can be dismissed without other comment.

Second. Suprapubic section, with avulsion and such after treatment as the case demands, must king contend for first place in the list of radical operations, because it permits of free exploration of the obstruction and its removal under the eye. The addition, in such cases as demand it, of perineal drainage, or a permanent suprapubic fistula, make it a most satisfactory procedure, when chronic cystitis, suppuration, suspicion of stone or tumor, complicate the enlargement. The McGill operation with McGuire's fistula, or Belfield's perineal drainage, meet these indications effectually.

Third. Perineal section and enucleation promise more than suprapubic section if the future bears out the brilliant beginning Alexander describes his operation in the following language: "The patient being anesthetized, the bladder is emptied by catheter and is then distended with borax solution, from eight to ten ounces being sufficient in most cases to bring the organ well above the pubes. I have discarded the use of a rectal bag. The bladder is then exposed by vertical incision between the recti muscles, and two retraction sutures are introduced between its walls. Between these an opening is made into the bladder large enough to allow the operator to insert two fingers. The bladder and the projecting portions of the prostate can now be examined thoroughly. The suprapubic opening is then covered with gauze and the patient placed in the lithotomy posture. A broad median grooved staff is passed into the bladder through the urethra and held by an assistant. The membranous urethra is then opened by a median perineal section, the floor of the urethra being thoroughly cut from just behind the bulb back of the apex of the prostate. This must be done thoroughly. The staff is then withdrawn and the gauze removed from the suprapubic wound. The surgeon now washes and disinfects his hands. Two fingers of the left hand are then passed into the bladder through the suprapubic wound, and by these the prostate is pressed downward into the perineum. With the forefinger of the right hand the surgeon begins the enucleation which is performed entirely through the perineal opening. The fibrous sheath of the prostate covering its posterior and inferior surface is broken by the finger and the capsule entered; the entire prostate is shelled out from within its sheath by digital dissection. The inferior and posterior surfaces of the prostate should be first separated from the capsule. The mucous membrane of the bladder and prostatic urethra covering the enlargement; with the underlying muscular tissue, is stripped up from the part to be removed, but is not opened. The lateral lobes are first removed, after which, if there is a middle enlargement, or a projecting tumor or tumors, these can be pressed downward into the perineal wound and enucleated in the manner. During the enucleation the prostate can be drawn into the perineum by forceps, and for this purpose I use an ordinary ring sponge holder with a strong lock in the handle.

"After removal of all the prostatic growths the lower wound is flushed with a 1 to 5,000 bichloride solution, a perineal tube is inserted into the bladder, and a rubber drainage tube of moderate size is placed in the bladder above the pubes. The retraction sutures are removed and the bladder is allowed to drop back behind the pubes. The upper part of the suprapubic wound is then closed by sutures, and a dressing of gauze pads applied which is perforated to permit the drainage tube to pass.

"The after-treatment consists in daily washings of the bladder, the fluid being injected into the suprapubic tube. All urine flows out of the perineal tube. The upper tube is removed on the fourth day and the lower three days later, after which the bladder is washed by catheter through the perineum for a few days. A full sized sound is passed at the end of the second week, and then every five days until the perineal opening closes. Both wounds have usually healed in the course of five weeks."

Fourth. Castration (as originally suggested by Doctor William White) has taken a strong position by virtue of many reported successes. It has been demonstrated in a most unequivocal manner that atrophy of the prostate and relief of symptoms follow the operation in about the same proportion of cases as are relieved by prostatectomy, while the mortality is

about the same. Cabot concludes, after an extended investigation, that the field of prostatectomy is larger. Though his conclusions are not wholly shared by some surgeons, it is still a question of submission to a trying loss, and both the vigor of the patient and his mental equilibrium are believed to be endangered, apart from the severity of the operative steps. On a certain character of cases castration has no effect, especially fibrous and adenomatous tumors, as well as vesical stone.

Fifth. Vasectomy or excision of a part of one or both vasa appears to meet the same indications, though less promptly, and to be less distressing to the patient. Harrison explains that ligation and excision of about one inch of the vas should be done on one side only. If improvement is not satisfactory in a month, it should be done on the other side. In a few months at the latest, atrophy of the testicie will appear, and the same functional results will obtain as after castration. The operation is much less severe than castration, but the effect on the mind does not appear less frequent. Besides the delay is so great in many cases as to exclude such an operation in the premises.

Kane suggests introduction of a long, curved, prostate catheter of silver allowing it to remain in the bladder at least three days with the patient on his back in bed quieted with opium if required, and reports success in several cases by this method.

Considering all conditions and influences, we are led to conclude:

First, that in malignant disease any operative steps except palliative suprapubic drainage, even if based on an error of diagnosis, is a serious mistake:

Second, that in myomas, fibromas and adenomas it is yet uncertain that good will follow castration; moreover that such conditions render enucleation by Alexander's method difficult and perhaps not feasible; hence, when interference resists catheterization and is not remedied by the permanent catheter, suprapubic section and removal of the projecting portion, if practicable, or the permanent fistula of McGuire, is the wisest course:

Third, in conditions including stone in the bladder, suppuration in the gland, and the suspicion of intra-vesical growths, exploration by the suprapubic method offers the best prospect of relief:

Fourth, as castration, distasteful even of suggestion, is less acceptable to men under sixty-five years than later, the commonest form of enlargement, the chronic parenchymatous, to which the operation of Alexander is especially appropriate, will be best treated by this method; it has almost no objection, aside from the seeming gravity of the steps.

Depression of desperate and protracted suffering may lead a patient to consent to the mutilation of castration, when, after relief, regret may tend to grave dissatisfaction and even melancholy. Hence, though apparently a less serious and certainly a more easily executed operation than either the Alexander or the McGill, it is to be looked upon as less appropriate than either, other things being equal, before the sixty-fith year, and perhaps not to be even suggested when the Alexander method can be applied.

DISCUSSION.

Dr. W. L. Rodman—Dr. Grant has certainly given us a very excellent serume of modern up-to-date literature of the subject, and I feel obliged to him for it. Ot all radical operations, the method suggested by Nickel is probably the most ideal, combining as it does manipulation of the bladder by the supra pubic route, and also enucleation of the enlarged prostate through the perineal route. You can press the gland well down into the perineum, and it is said it can be enucleated without any hemorrhage at all. I must say I was surprised to find this could be done so easily. There have been only a small number of cases reported as operated upon by this method, but up to date the results have been such as to offer us considerable encouragement. The mortality has not been as great as one might suppose it would be.

I agree perfectly with the contrast Dr. Grant has made between the advantages of supra-pubic prostatectomy and double castration. Of the two supra-pubic prostatectomy has a larger field than castration; the mortality, however, of the two operations is about the same. I was a little surprised to find that Cabot states the mortality of supra-pubic prostatectomy is a shade less than that of double castration itself, we have been taught to believe, is a simple procedure. A resume of 139 cases shows the mortality after double castration to between 18½ and 20 per cent. whereas after supra pubic prostatectomy it is about 18 per cent. Still there is considerable mortality in both operations, and I think we will be slow to advise either procedure in all cases. Cabot has intimated, to a certain extent, the cases

There is another advantage in the supra-pubic operation, and that is, we all occasionally make mistakes in diagnosis, and we can get into the bladder by this method and can detect a stone which may be the cause of the trouble and has remained undis covered hitherto. I have known such an accident to happen to excellent surgeons several times. Of course it can be removed by the supra-pubic operation without in any way increasing the mortality. Where we have an enlarged middle lobe of the prostatectomy should be done; where we have enlarged lateral lobes from congestion not due to a new growth, then dcuble eastration should be practiced.

Dr. Graut touches npon the mental condition following castration: Statistics clearly show that many persons who have been castrated have become morbid, melancholic, and some have even gone insane a long time after the operation. Suicide has also been recorded because of the mental condition induced by loss of the testicles.

Another thing must be considered is the violent opposition of patients to submit to this procedure. I have never been able to get a patient to allow me to perform the operation of double castration. I wish the essayist had said something about the voluntary consent of patients to the operation of castration for conditions of enlarged prostate. While I have never removed both testicles of the same patient for enlarged prostate, I have removed tumors of one testicle where the patients had enlarged prostates. One of the cases was seen by several of the gentlemen present; the man had quite a decided enlargement of the prostate, and I removed one of his testicles for multiple cystoma. It was easily demonstrated in this case that the enlargement of the prostate melted away on that side to a very appreciable

extent. I have also seen that result in two other cases, both of these cases being in older subjects, having larger prostates. One case was sent to me from the country, and the effect was marked after operation. In another case, an elderly man, I was quite well satisfied in a short time after the operation, and even more satisfied several months thereafter, that there had been an appreciable diminution of the enlarged prostate gland on that side.

I think however, that either supra-public prostatectomy or double castration torenlarged prostate, will be considered rather grave operations, statistics up to date showing that there is a mortality of eighteen per cent, and this is a rather large mortality for us to advise operation in all cases of enlarged prostate. Some of the more trival operations may be indicated, and Hunter McGuire's method as indorsed by Dr. Grant ought to be employed more than it is. It is comparatively a small operation, attended with a low mortality, not over two or three per cent, and it has been shown that the patients so operated upon lead comportable lives afterward, and in many instances they regain control over the urethra. The prostatic enlargement has been known to melt away very rapidly where adequate drainage was instituted from above.

I am sure I shall be slow to advise either double castration, or prostatectomy, perineal or supra-pubic, in a person who is near to me, with the mortality as high as it is at the present time.

I think a still more simple procedure will in many cases do good, and as I speak I recall the fact that Dr. D. W. Yandell, who has paid a great deal of attention to this subject, having suffered for years with enlargement of the prostate, was led to think early dilatation with the bougie had quite an effect on the degree of enlargement of the prostate. He thought he had been very much benefitted by this treatment, having undergone it in the hands of the younger Gross several years ago. I know he treated a great many cases in this way, and was satisfied with the result and I felt satisfied myself that I had seen many of his patients benefitted by gradual dilatation. Of course divulsion or tearing of the urethra renders the patient liable to sepsis, but gentle manipulation of the urethra by graduated bougies, when the urine has been sterilized beforehand by means of horic acid, salol, etc., is a simple procedure and I think it can be done without danger, and when once instituted the patient can continue it himself. If he finds at any time that there is some slight swelling of the prostate, if the flow of urine is not as free as it should be, or if he is suffering from any indiscretions of diet or drinking, he can to a certain extent be master of the situation, can introduce a bougie and keep himself in such a condition that none of the radical and dangerous operations will be necessary.

The operation of vasectomy is one which statistics to date show as decidedly unsatisfactory. The mortality, I think, is higher following this operation than either prastatectomy or from double castration, and I cannot myself see just why it should be practiced. Of course a man is left with his testicles which may be a mental comfort to a certain extent, but practically the same thing is accomplished as would be done by removing them. The mortality is greater, according to Cabot, from vasectomy than from the other operations, while relief, which is the principal thing sought for, is not so great.

Dr. A. M. Vance-In looking over current medical literature I notice there has been considerable discussions it St. Louis, especially a paper read by Dr. Brown, of Texas, on the conservative treatment of enlarged prostate, the operative side being held up by Dr. Lewis who quotes largely from Cabot. I am surprised that the mortality of vasectomy should show twentytwo per cent. castration eighteen per cent. and prostatectomy nineteen per cent. I am sorry that none of us can speak very much for personal experience about these matters, and I still feel like holding up the conservative end. I have castrated a great many men, always for some diseased condition, usually of Most of these cases have been in young men. Out one side. in this part of the country I do not believe we are going to have much opportunity for operative work in this line. Kentuckians want to hold on to their testicles, as a rule, and I believe we shall not have many of these cases to deal with in an operative way. We cannot handle our patients here like Cabot can. He has better control over his patients, like they have in foreign hospitals; most of his cases are in hospital patients. Consequently we have to trust to conservative methods for this reason.

I have had little or no experience in an operative way for the conditions described, and the good results I have obtained from simple conservatism have proved to my mind that this is best, except where the operation of cystomy and drainage is called for, which is because of inflammation set up by treatment as a rule. I would certainly rather trust to dilatation as described by Dr. Rodman, and as mentioned in the paper I recently read before this society. You can keep the urine diluted, and keep good drainage through the urethra just as well as by means of the catheter. While the catheter is a very dangerous thing, I confess there are some emergency cases where its introduction becomes necessary, but its use should be restricted to those cases in which it is absolutely necessary to withdraw the urine at once, and then the catheter should be made as nearly sterile as possi-I believe the least foreign matter, instruments, etc., that we introduce into the bladder, the better it is for our patient. The steel sound is perhaps the least harmful of anything, but even this should be used only when necessary for prompt relief.

I feel sure we will have to stick to our conservative methods, at least in this part of the country, first because better results follow, and second because patients will not consent to the more radical measures.

Dr. James B. Bullitt-It strikes me that the Louisville surgeons are not behind the rest of the world in this matter, but they are waiting until New York and the rest of the world try these radical operations thoroughly before taking them up here. People in this section of the country are not so well educated in surgical matters as they are in the east, and the surgeons here oftentimes have to wait until men who do work in this line in other sections of the country have demonstrated the successful issue of such procedures before patients will consent to radical operative measures. We are familiar with the fact that within the last ten or fifteen years there have been surgical operations that were once frequently practiced which have now disappeared entirely from the field. It is not that surgeons here are less courageous but more conscientious than those of other parts of the country. When such surgeons as Willy Meyer ties both internal lliac arteries for the purpose of relieving hypertrophy of the prostate, with a mortality of three in three operations, it seems almost time for surgeons in this part of the world to wait until men get through fighting over the different operative procedures, and wait until the field of battle clears up in order to select what appear to be the proper operations. It certainly seems a very striking thing that surgeons of Louisville have been called upon to perform so few of these operations. We have as good surgeons here as elsewhere and if these operations are necessary why need patients go to other cities to have them performed? We know, however, that this is true in several instances within the last few years. As Dr. Vance has said conservatism is best in matters of this kind, and perhaps operative procedures ought to be relegated to a time when they are more certain and less unsatisfactory than they are at present.

Dr. W. C. Dugan—I am surprised that none of the surgeons present have operated upon cases of enlarged prostate by the methods that have been described: Double castration or prostatectomy. I have never performed the latter operation but have done two double castrations, for enormously enlarged prostate. One of the operations was performed recently, and what the outcome will be I am unable to state. I have heard from the man but once since he returned home, and he did not say whether there had been any improvement in his condition or not. The other man was operated upon for tuberculosis of both testes, with secondary deposit in the prostate giving it that characteristic feel. Whether it was actually tuberculosis of the prostate or whether it was the condition described by Dr. Grant in his paper which so closely resembles it, with deposit of new

tissue, I am unable to say. I am able to report, however, that the man became perfectly well and has had no trouble since. The operation was performed in 1888. The patient was seen in consultation with the late Dr. Palmer. The man is living now and enjoying good health, mentally and physically.

I am surprised at one statement made by Dr. Grant, viz: That the fibroid condition of the prostate is not relieved by operation: Doctors Griffith and Kirk claim that such cases are relieved. They maintain that the stroma is as much a part of the organ as the glandular structures, and that there is a decided shrinkage of the enlargement after operative measures, which Dr. Grant is unwilling to admit. In Dennis' system of Surgery Dr. White gives some very favorable statistics, claiming that ninety per cent, of all cases are benefitted by operative means and a good per cent, symptomatically cured and a fair per cent, actually cured. I believe these operations have a future.

Dr. H. Grant—I am inclined to think I must have made the same review Dr. Rodman did of the subject for the conclusions at which we have both arrived from looking over the literature are nearly in accord.

Dr. Bullitt's position is correct, what he says in a measure is true, but there is one point he did not sufficiently emphasize: The reason that those operations are not done by surgeons in Louisville is because, according to the best statistics we have, very few patients are permanently relieved, and many of them The same is true of vasectomy; the prostatic hypertrophy is not relieved, and with the mortality that attends the operation we hesitate to subject patients to it. As long as a man can get along in comparative comfort by the use of the catheter, we hardly feel justified in advising a radical operation. It is a grave thing to subject a man to an operation with the understanding that he has but four chances out of five of getting over it, when he is fairly comfortable without operation. There is no question that relief is always obtained by the use of the catheter, and for this operative measures are delayed in many While we see a great many cases of enlarged prostate in this section of the country, comparatively few operations are performed; patients as well as surgeons, on account of the high mortality, are prone to delay the operation as long as possible. Patients often consult me with enlarged prostate, and when operation is proposed, while it is not met with absolute refusal, they promise to have it done at some future time, and pass from observation.

I think Dr. Dugan misunderstood me as to the effect of castration on fibromatous and myomatous conditions of the prostate; I had no other authority except what I had read. I have never done this operation. I stated that White did not oppear to think castration favorably influenced these con-

ditions. Cabot also claimed that it did not, and there is hardly a difference of opinion in this particular. but few of these operations, comparatively speaking, have been Not over 150 or 200 operations have been collected by skilled observers. A great deal of difference in judgment of different surgeons in regard to enlarged prostate is because of the various pathological conditions encountered, otherwise there would probably be little difference in opinion. It is true statistics on this subject are still necessarily small, it has only been a year or two since the first operations were performed, and we have no positive data on which to base conclusions. It appears from what has already been reported that myomatous and fibromatous enlargement of the prostate due to tumors of any kind, will not be influenced favorably by castration. The diagnosis therefore must be accurately made out before any hope of improvement can be entertained from any method of treatment. I think it will be but a short time before some of these operations will be done in Louisville, and it seems to me the operation suggested by Dr. Alexander would be the one I would advise upon a case in which I was especially interested. My experience in enucleation of the thyroid gland has led me to believe it would not be difficult to remove the prostate when it is enlarged in the same manner that we would remove the thyroid. If this can be done, there is certainly a great advantage in it, as there is no wound to be infected by the contents of the bladder, The injury is entirely below the bladder, drainage is easily effected, the prostate can be removed and relief obtained in this way without trouble, and the operation is one that can be very satisfactorily done. However, I should certainly advise the operator to practice upon the cadaver before undertaking it on the living.

It seems to me that the permanent catheter would be more effective than the occasional introduction of the bougie, if the catheter could be tolerated by the bladder. In many cases it is impossible to get a catheter into the bladder where the prostate is very much enlarged. If, however, it can be introduced into the bladder and tied there it can be worn with safety for several days; the urine will drain off through the catheter and the pressure, exerted by an instrument of this kind upon the enlarged prostate would be much more favorable than the occasional introduction of a bougie. This is the best treatment in cases where trouble is experienced in emptying the bladder before any radical operation.

I do not see how it is possible for removal of one inch of the vas deferens to result fatally, unless there is gangrene of the testicle, which does not appear in cases reported. In none of the cases where death has followed vasectomy are we able to

find any explanation of death. It is reported to be so and so, but I am inclined to think most of the operations by vasectomy have been done when previous constitutional disease enfeebled the patient too much to resist any operation. Gangrene may possibly occur, but it does not seem to have been the case where deaths have been reported from this operation.

In a recent report there was no death recorded in some forty-five or fifty cases,—it appeared that every one of them recovered, with seventy-five per cent. relieved. Dr. Harrison who introduced the operation states that an incision of one inch should be made down to the vas, and he then simply raises it up and cuts off about an inch. He does not report any deaths. He did but few of the operations, simply introduced the method, but gave it as his judgment that it was primarily independent of danger, although there may be danger subsequently. The chief danger lies in the fact that the operation is not properly performed or else that the patient is not in a condition to bear any shock.

Society Reports.

NEW YORK ACADEMY OF MEDICINE.

Section in Orthopedic Surgery, Meeting of October 21, 1898.

FRACTURE OF THE SPINE.

Dr. Whitman presented a patient with the following history. He was a young man 22 years of age who had fallen 25 feet from a cliff. He could walk with assistance and, although he had pain, stiffness and weakness in the back, numbness and weakness in the legs and pain in the lower part of the abdomen and the anterior surface of the thighs, he resumed work as a clerk at the end of a week. Dr. Whitman had examined him on August 8th, about two weeks after the accident, on account of a "lump" composed of the projecting spines of the 2nd, 3rd and 4th lumbar vertebræ. There was some pain on the extensive motion of the back and moderate rigidity at the seat of the fracture. A brace relieved the symptoms in a great degree and at the end of a month he considered himself well although he was still wearing the brace. It was seen that the normal lumbar lordosis had been replaced by a projection.

Motion was practically normal. There had been fracture and compression of the vertebral bodies and yet the symptoms had been insignificant.

Dr. Myers recalled the case of a man who had fractured his spine in a fall of 25 feet in a double forward position. Pain was not severe but weakness in the lumbar region, the seat of the fracture, prevented sitting up or standing. He was in bed three weeks and then walked with a cane. A kyphos was found and a spinal brace relieved his symptoms very quickly. He was well in six months. Fractures of the verterbræ often gave symptoms but poorly marked when compared with fractures in other locations. The most common symptom was weakness. Crepitus and false points of motion were not usually detected. Pain was moderate and deformity was frequently absent until after the patient had assumed the erect position for several days.

UNUSUAL FRACTURES OF THE NECK OF THE FEMUR.

Dr. Taylor presented a boy 15 years of age who, in October 1896 felt sudden severe pain in the right leg followed by lameness for two weeks. No shortening was noticed. After that he had lameness and disability with but little pain till January 3rd, 1897, when he slipped and fell on the floor with the knee bent under him. He was unable to rise or walk and the neck of the right femur was found to be broken. He was treated by a plaster of Paris application and in July 1897, when first seen by Dr. Taylor, he was limping badly, the trochanter was one inch above the line, there was extreme eversion and very limited motion. Crutches were advised. In December 1897 the patient had been free from pain for many months and there was increased motion. In April 1898, under an anæsthetic, more mobility and lessened eversion were gained by manipulation which was repeated in September 1898 with further improvement.

Status praesens: 30 degrees of free lateral motion, considerable free rotation and 30 degrees of flexion. Trochanter a full inch above the line. Walking was very free but with a slight limp. An apparatus, soon to be laid aside, was worn to prevent outward rotation.

Dr. Taylor also presented a boy of 18 years who, in December 1897 fell on his left knee. There was immediate stinging pain in the left hip but he could walk with some assistance. He soon walked with a cane and three weeks after the fall there was a marked limp with very little motion in the hip. The limb was one inch short and rotated outward. The trochanter was one inch above the line and there were tenderness, induration and muscular spasm about the hip. Treatment was by traction splint, long crutches and a high sole on the foot of the well side. In May 1898 the patient had been free from pain for two or three months and there was more motion: The splint was removed. In September a cane was substituted for the crutches.

Status praesens: Walking with a considerable limp. No pain. Can raise the leg while lying Shortening of 1½ inches. Limited motion at the hip and adduction. These cases were of especial interest on account of the youth of the patients and the slight violence of the accidents.

Dr. Whitman said that the first patient doubtless had coxa vara which weakened the neck of the femur causing it to break under a moderate degree of violence. In three cases of coxa vara in young subjects he had operated by removing a wedge from the base of the trochanter in order to restore the neck to its normal position and strength. The second patient also probably belonged to the same class. He recalled the case of a young colored girl who, after a period of slight limping and outward rotation with slight stiffness of the hip and pain in the thigh, suffered a fall on her way to school. She was carried home with typical fracture of the neck of the femur. She was treated by the use of a traction splint with a favorable result.

Dr. Taylor said that he was confirmed in his opinion that bending of the neck of the femur had preceded the accident and had made easy the fracture of the bone in the case of the first patient presented. In the second case, however, there had been no previous signs or symptoms of deformity of the femoral neck and such condition must be considered hypothetical.

GENERAL DISLOCATION OF THE HIP.

Dr. Elliott exhibited a further dissection of the specimen shown at the last meeting of the Section. (See The North

CAROLINA MEDICAL JOURNAL, August 20, 1898, pp. 120, 121, Editor.) The patient had been a girl seven years of age. dislocation of the right hip had been upward and forward. The neck had been found to be short and the muscles shortened and somewhat atrophied. During life there had been more than one inch of shortening and the child had walked with difficulty like one with weak muscles. The head had made a deep and extremely well defined acetabulum lined with cartilage, below and near the anterior superior iliac spine. The original acetabulum was almost equally well defined, measuring 13/8 inches in its vertical and winch in its transverse diameter with a depth of 1/2 in. So well defined a first acetabulum at this age was rare. Lorenz cited one at the age of 18 years and the older anatomists found them at very late periods of life. As a rule, however, the acetabulum not in use failed to keep pace with the development of the other parts and at an age much younger than that of the specimen it was usual to find it rudimentary and frequently presenting a convex contour. The old acetabulum was found to contain some fat but was chiefly occupied by an exceptionally large ligamentum teres, measuring 11/2 inches in length, 3/4 in. in width and 3/8 in. in thickness, running from a well defined cotyloid notch through the vertical diameter of the acetabulum to an insertion in the femoral head. As a rule the ligamentu.n teres had been found at the age of 3 or 4 years to be a mere ribbon, or to have disappeared. In the usual dislocation on the dorsum iliac, the disappearance of the ligament might be explained by the facts that it had no function and was compressed closely between the margin of the acetabulum and the femur. In the specimen, however, the displacement had been directly upwards and the tremendous size of the ligament was apparently the result of its being called on to sustain the weight of the trunk at every step in walking. Its great size then was physiological rather than pathological.

Dr. Whitman said that the old acetabulum appeared to be of fair size and that, as the tissues were doubtless far more yielding in life than in the preserved specimen, an operation by the open method in which the hypertrophied ligament would have

been removed, might have been successful.

Dr. Sayre said that, as the head was as broad as, if not broader than, the place where the acetabulum should be, it was doubtful whether chiselling away a part of the head would not have been required before reduction.

TABETIC TALIPES VALGUS.

Dr. Judson presented a photograph of talipes valgus of the left foot in a man about 35 years of age afflicted with locomotor ataxia of several years duration. It was an instance of Charcot's joint affecting the tarsus. The patient's right knee joint had been exsected for this condition but stability had not been restored to the knee by the operation. Pathologically there were pulpy and fluid degeneration of the bony and other tissues and disintegration of the structures of the joints. Equino varus also occurred in locomotor ataxia and in Frederich's disease but was the result not of bony changes but of adnormal The primary disease was so serious and muscular action. disabling that the question of treating these secondary affections was not often a practical one. Mechanical treatment might, however, be considered with three objects in view: r, to give firmness to the foot and ankle and direct the sole to the ground; 2, to give lateral support to a Charcot's knee; and 3, to stiffen the knees by the use of automatic joints in order to prolong the period when locomotion is possible with the aid of crutches.

THE NEW ARMY HOSPITAL AT SAVANNAH, -The following description of this proposed hospital which will be the largest maintained by the government is found in the Medical News. The ground plan of buildings will be rectangular, with covered ways connecting all of the buildings with each other, and with the administration building in the center of the group. There will be forty-nine buildings in all. The cost of the Savannah establishment is to be \$150,000. The material used will probably be Georgia pine. The buildings are to be designed aud constructed with a view to permanency. Each building vill be ceiled inside and under the floors. Each of the four sides of the quadrangle will contain a ward capable of accommodating 250 single beds, with ample space between, making room for 1,000 beds in all. One ward will be set aside for surgical cases, and an enclosed passage-way will connect it with a modern operating-room. Besides the general wards there will be private sick-rooms for the accommodation of invalid officers. plumbing is to be of a permanent character, and the drain-pipes will be connected with the city sewer system. The artesian water supply will be unlimited. The heating will be by means of coal base burners. It has not been decided whether the lighting will be by electricity or gas, but both are immediately at hand. There is an ice factory within fifty yards of the site, and ice is 15 cents per hundred pounds by retail. The officers' quarters will be of two stories. The domitories for the nurses and hospital corps will occupy two buildings. The chief surgeon will have a private residence.

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PEDIATRICS:--J. W. P. SMITHWICK, M.D., La Grange, N. C.

TRANSLATION AND FOREIGN REVIEWS: RICHARD H. WHITEHEAD, M. D., Chapel Hill, N. C.

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Editorial

HEALTH CONFERENCE.

The annual health conference of the State Board of Health will be held in Winston Salem on the 7th of December. We are pleased that the Board has selected this city for its meeting and feel sure that the Conference will receive a hearty welcome from all who desire to see the two towns keep abreast of the times in the matter of sanitation. These conferences always do good to the town in which they are held. They awaken interest in sanitary matters in the mind of the people and are a source of useful education. Especially is it well for the city authorities to be brought into direct contact

with the Board, so that the matters which must necessarily come before them in the discharge of their duties as custodians of the health of the people over whom they rule may be freely discussed from the standpoint of the modern sanitarian; thus may they be better qualified to enact wise laws for the preservation of the public health. We trust that every member of the city council may be present at all the meetings of the Conference, and that some representative from the neighboring towns may be delegated to attend the meeting. In this way the usefulness of the Board will be felt over sections of the State where it is entirely impracticable for a Conference to be held.

DR. ROBERT H. WINBORNE.

It becomes our said duty to chronicle the death of Dr. Robert H. Winborne, which occurred at his home in Chowan county on the 7th of November, 1898. Dr. Winborne was in his 73rd year and was one of the oldest and most honored members of the Medical Society of the State of North Carolina. For forty four years he was an active practitioner of Chowan county and during that time had greatly endeared himself to the people among whom he worked. The immediate cause of his death was heart disease.

Since the last meeting of the Society death has claimed two of our oldest members, Dr. Gibbon and Dr. Winborne. It is with much sadness and a sense of the rapid flight of time and the unchangeableness of the great laws of nature that we see our ante-bellum members dropping, one by one, from the ranks of our profession; but though their active life-work must cease we know that the good they have done will live after them, and that even in death, the seeds they have sown will continue to yield fruit. We trust that the Obituary Committee of the Society will take such steps that the memory of their good deeds and noble lives may be perserved in the archives of the Society and serve as ensamples for the help and guidance of those who follow them.

TROUBLE AT THE WILMINGTON HOSPITAL.

We see from the local papers that there has arisen a very unpleasant state of affairs among the medical staff of the Wilmington City Hospital. Nearly two years ago there was a reorganization of the management of the hospital, the Board of Managers appointing a Board of Regents from among the local physicians who should have charge of the medical affairs of the hospital, and one of whom should make a daily visit to the hospital to see that the patients had proper treatment—in fact the patients were placed under the medical care of the Board of Regents. The Board was to select as Resident Physician one of those six applicants before the Board of Medical Examiners, who made the highest general average. To fill this position, the Board selected from the class of 1897, Dr. R. E. Zachary. was to serve one year as Assistant and the second year as House Physician. The conduct of the hospital still proved unsatisfactory and the Boards of Managers and Regents requested Dr. Wertenbaker, of the Marine Hospital Service, to assume temporary charge of the hospital and place it on a good working basis, after the plans of conduct of the marine hospitals. With Dr. Wertenbaker's experience and executive ability the condition of the hospital seems to have greatly improved, with the exception that there have been frequent clashes of authority between Dr. Wertenbaker and Dr. Zachary. The tension became greater when a young physician was imported from Virginia and made Assistant Superintendent to Dr. Wertenbaker, thus being placed over Dr. Zachary. Things reached such a condition that at last Dr. Zachary's resignation was asked for. He refused to resign, claiming that his election, which was upon competitive examination, was for two years which would not expire until July, 1899. The Board of Managers then adopted resolutions dismissing Dr. Zachary, and on his failure to leave the institution by 12 o'clock of November 30th, that officers be sent to eject him by force. This was done and Dr. Zacharv has instituted suit for his salary to the expiration of his term of office and \$10,000 damages.

These are the conditions which are visible from the outside;

what more exists we do not know. To our mind the first mistake was made when Dr. Zachary was appointed to the position, for the Board of Regents knew that he was an undergraduate, having only taken a preparatory course of medicine, and that while he stood well in theoretical training, he had never been in contact with a case of sickness and was of necessity unfitted for the position. The next mistake was in Dr. Zachary's failure to resign, when, knowing his lack of preparation, he saw that his services were unsatisfactory. The appropriations for the hospital from the city and county are quite liberal, and with the fees from private patients are sufficient to carry on a most excellent work. It is not sufficient to conduct a hospital after the manner of the Marine Hospitals, for they have in charge of them high salaried officers, qualified by years of training under superior officers. We would recommend to the Board of Regents that they send one of their number to inspect the Twin-City Hospital in Winston, which they will find a model of neatness, economy and usefulness. It is dependent entirely upon voluntary subscription, is under the charge of a most competent trained nurse, who took charge of the institution with full knowledge of what a hospital ought to be. She has as her assistants two young ladies who, after two years of training are sent to one of the northern hospitals for more complete training. The Board of Managers is composed of ladies of the Twin-City Hospital Association, and two physicians. All the white physicians of the city give their services, serving one month at a time. The fare served the patients is excellent and prepared under the direction of the Sup rintendent. The hospital is equipped for eighteen or twenty patients, and while it well that its capacity be increased, the work that is being done is eminently satisfactory.

THE TRI-STATE MEDICAL SOCIETY OF VIRGINIA, NORTH CAROLINA AND SOUTH CAROLINA.

For several months there has existed the desire for the organization of a society that would bring into closer relation the profession of these neighboring states. At a meeting held at Vir-

ginia Beach on the 31st of August this desire took the form of a temporary organization of a Society to be composed of members of the profession of the three states. Dr. W. H. H. Cobb, of Goldsboro, N. C., was made Chairman; Dr. H. H. Dodson, of Milton, N. C., Treasurer; and Dr. Paulus A. Irving, of Richmond, Va., Secretary. The Chairman was authorized to appoint a committee of organization for each State, and it was decided that a meeting for the permanent organization be held in North Carolina sometime in December. The place of meeting we have not learned definitely, but it will be either Charlotte or Raleigh.

When we were approached in regard to the organization of this Society, we must confess that we were inclined to look upon it with disfavor. North Carolina was the pioneer in the matter of medical legislation, and as all the laws on this subject that she has enacted have emanated from the State Society and been carried to success by its influence, we feel that the interest of every member of the profession in the State should be with this Society, and that each should use every effort to promote its prosperity. Any move which threatens its influence should not be upheld, and our disfavor toward the proposed organization was due to a fear that interest in the State Society might be made secondary to that in the larger organization. The Society at present embraces less than a third of the profession in the State, and its influence for good would be greatly lessened were its membership to decrease, or even not keep pace with the growth of the profession. It is through attendance on the meetings that interest in the Society is kept alive. majority of our members cannot attend more than one meeting in a year, and many barely succeed in attending often enough to keep their dues within the constitutional limit. A large number of these, if turned aside to attend the meetings of the larger organization, would gradually let their names drop from the roll of the State Society, not because they do not love the Society, but because they could not afford to attend both meetings and preferred that where they would come into contact with a greater number of prominent men.

Personally we believe that the new organization will prove of great interest and profit to those who attend its meetings, for

among its membership will be found men who stand in the front ranks of the brighrest and most progressive physicians and surgeons in America; but if the organization is to prove a rival of, and a menace to the usefulness of, the State Society we will never However, we believe that it is far from give it our support. the purpose of the promoters of this step that this should be the case, in fact we believe that rather than produce such a result they would at once abandon the whole project. Now we believe that the new society can be made a supporter rather than a rival of the several State Societies, and can so be made to receive the hearty support of all their members. This can be done by a constitutional provision that membership in one of the several. State Societies shall be included in the requirements for membership in the Tri-State Society, and that a member cannot retain his membership in the latter, if he ceases to be a member of his State Society. We think that every member of the temporary organization are members of their respective State Societies and that each one has the interest of his State Society deeply at heart. We would ask that at the coming meeting this matter be seriously and carefully considered, for without some such provision the State Societies will be bound to suffer, while with it interest in them would be stimulated and their membership increased, and pari passu their influence in the enactment of good laws that will promote the health of the people aud advance the cause of the profession.

Reviews and Book Hotices.

The Office Treatment of Hemorrhoids, Fistula, Etc. Without Operation, together with remarks on the Relation of Diseases of the Rectum to Other Diseases in Both Sexes, but especially in Women, and the Abuse of the Operation of Colostomy. By Charles B. Kelsey, A. M.. M. D., Late Professor of Surgery at the New York Postgraduate Medical Sochool and Hospital; etc. E. R. Pelton, New York. 1898.

This little book is a disappointment to us. We expected to find in it a description of the distinguished author's method of treatment for hemorrhoids without operation, but we do not find it. The volume is simply three lectures, one of which has been published, in the first of which the author tells his class

that there are many cases of hemorrhoids which should be carred by repeated treatment in the office and not subjected to operation. He does not tell them what to do. In the second lecture he impresses the fact that a rectal specialist should be well up in all other branches especially in diseases of women, for there are many rectal troubles that are dependent on some disease of the other pelvic organs and will not yield until the latter is remedied. The third lecture is a plea for less frequency in operating for articial anus.

Practical Therapetstics. A Text-Book of, with especial Reference to the Application of Remedial Measures to Disease and their Employment apon a Rational Basis. By Hobart Amory Hare, M.D., B. Sc., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Physician to Jefferson Medical College Hospital; etc., etc. Seventh Edition, enlarged, thoroughly revised and largely rewritten. In one royal actavo volume, pp. 766. Lea Brothers & Company, Philadelphia. 1898.

The sixth edition of this work was exhausted in about nine months and it has been only eight years since the original edition was published. In this age of many medical books it is seldom that such popularity is shown any individual work. Since the appearance of the last edition there has arisen very little that is new, but the author has taken occasion to insert several illustrations designed to elucidate descriptions of technique or therapeutic results, and also to make the text conform, not only to the Pharmacopæia of the United States but also to the British Pharmacopæia of June, 1898. In the last issue of the Journal we had the pleasure of noticing a new edition of the author's work on Practical Diagnosis and to call attention to the fact that the two works are intended as companion volumes. The author has well applied the term "practical" to these volumes, for there is nothing in them that will not appeal to the general practitioner as a really practical aid in determining and treating diseases. The two volumes make one of the most useful works on the practice of medicine that the busy physician can find.

Review of Current Literature.

PATHOLOGY.

IN CHARGE OF
ALBERT ANDERSON, M. D., WILSON, N. C.

A NEW DISEASE VIRUS (MYXOMATOUS VIRUS).—Sanarelli, of vellowfever-bacillus fame, has recently described a new form of disease-producing virus which if his discovery is verified, may throw a light upon the dark chapters in the history of syphilis, rabies, and other infectious diseases. He publishes in the Centralblatt fur Bakteriologie. vol. xxiii., 1898, p. 865, his observations on a disease of rabbits, which he has had in his laboratories for the past two years. This disease first shows itself as a blepharo-conjunctivitis, which goes on until the eyes are closed and the small opening between the lids is filled with a thick catarrhal purulent secretion. At about the same time there appear in different parts of the body small subcutaneous tumors of various sizes, and there is a general diffused thickening of the animal's skin and mucous surfaces. Death usually occurs in from two to five days, and there are found gelatinous subcutaneous tumors of an elastic consistence and rich in blood-vessels, hypertrophy of the lymphatics, orchitis, and hypertrophy of the spleen. Histologically, the body throughout would seem to be the site of a general myxomatous infiltration. This myxomatous material is the true cause of the disease, according to Sanarelli, and he has been able to convey the disease from one animal to another in as many as four different ways. This material—serum—obtained from the myoxomatous virus, is absolutely sterile and contains no organisms that are appreciable to the eye, aided with the best optical helps. Mice, guinea-pigs, monkeys, and birds are refractory; in one case he was enabled to infect dogs to a minor degree. Experiments made upon man were, as a rule, negative. There was some slight cedema following the injections, reddening and reaction of the conjunctiva, but this soon disappeared. Experiments bearing upon the question of acquired immunity with the serum were negative. The observations are of interest, in that here we apparently have a diseaseproducing agent which, so far as yet known, has no organized units of structure.-Medical Record.

PRACTICE OF MEDICINE.

IN CHARGE OF

S. WESTRY BATTLE, M.D., U. S. N., ASHEVILLE, N. C.

EMBOLISM OF THE ABDOMINAL AORTA.—Heiligenthal (Deutsche med. Wochenschr., 1898, No. 33) reports an interesting case that came under his observation. The patient was a woman, forty-eight years old, who had been under the author's care for loss of compensation in mitral stenosis. Ten days after leaving the hospital, while sitting down and cleaning clothes, the patient felt a most intense pain in both legs: the pain continued, varying in severity from moment to moment. Admitted at once to the hospital, the patient was excited and restless and cried out continually: "My legs, my legs!" The face was sunken, the nose and extremities cool and cyanotic, the face and hands covered with sweat. The respiration was superficial, the pulse small, irregular. and too frequent to count. The heart-dulness was as before the attack. auscultation being impossible on account of the noisy breathing. The legs were blue and livid to the hips, and the color extended up the abdomen to a curved line, with the convexity downward, three fingerbreadths below the umbilicus. Voluntary motion was impossible, but there was complete passive mobility of the legs. The patient had no knowledge of the position of his legs; reflexes and sensibility to touch and pain were abolished up to the line of Poupart's ligament. On opening a small vein little blood appeared; heat caused no reaction in the skin. The femoral and popliteal arteries did not plusate. Urine drawn per catheter contained blood, albumin, and granular and epithelial casts. After a few hours the lightning pains subsided, the fivid color disappeared, but the paralysis persisted. The patient became drowsy, waking at intervals, and died about half a day after the onset. The diagnosis of embolism of the abdominal aorta was confirmed at the autopsy, when a firm, non-adherent thrombus was found at the bifurcation, extending into both iliac arteries. The mitral valve was contracted, the heart muscle not palpably fibroid. It was remarkable that there were no thrombi in the left heart, and the author thinks that a clot formed there was thrown in toto into the aorta. In seven other cases in the literature, six with mitral stenosis, the left heart was free from thrombi. The author has been able to find altogether twentynine cases reported, and adds to the report of his own case some remarks on symptoms, the formation of collateral circulation, and other pathological features. In two cases death did not follow the acciden until symptoms subsided considerably.-Am. Jour. Med. Sci.

PEDIATRICS.

IN CHARGE OF

J. W. P. SMITHWICK, M. D., LAGRANGE, N. C.

TWO CASES OF MANIA DURING MEASLES.—Finkelstein (Wratch, 1898, No. 20) reports two cases of this rare complication of measles in his service at the Saint Nicholas Hospital.

I.—A boy, aged thirteen years, was admitted on the twenty-eighth day after the onset of measles. The psychic disturbance had existed since the twenty-first day; it was characterized by furious delirium, with periods of extreme terror. At admission there were acceleration of cardiac activity, exaggeration of knee-jerks; and enfeeblement of nutrition. Intellection was slow, but questions were answered when repeated several times. There were hallucinations of a terrifying character (a black man); he made efforts to escape, fighting with his hands and uttering loud cries. Sleep was agitated. This condition lasted for a week, and then gave place to gradual and complete recovery. The history showed that the father was an alcoholic, and that the child had been abandoned, and, finally, had been apprenticed in a shop where his life was very unhappy.

II.—The second patient was a girl, aged fourteen years, who showed mental disturdance from the time of the invasion of the disease, six days before admission to the hospital. The parents denied any heredity During the first two days, while at home, the girl was sad and responded slowly to questions; the third day she showed signs of incoherence and hallucinatory confusion, manifested by dread of everything surrounding her. She cried out, threw away from her everything that came within her reach, and tried to run away. On admission to the hospital there was extreme exaltation and activity, preventing satisfactory examination; she cried out, striking with her fists; she did not answer questions, and repeated only the single word "injustice." She ran about the ward and threw everything away from her. She was very pale, and when examination of the chest could be made the vesicular murmer in both lungs was noted to be very harsh. Two days later the agitation was less violent and there was mental depression. Respiration was accelerated; and she seemed to have fever, but no thermometric record could be obtained. The next day the pharnyx was observed to be reddened, and on the following day the eruption appeared. From this time on she became quieter, and two days later remained quietly in bed, occasionally mumbling to herself and not replying to questions.

The heart was weak. Pneumonia developed and, with increasing feebleness of circulation, terminated in death six days after the appearance of the rash. The mind never cleared. No autopsy was permitted.—Am. Med. Jour. Sci.

GENERAL SURGERY.

IN CHARGE OF

H. T. BAHNSON, M. D., R. L. GIBBON, M. D.,

1. HOWELL WAY, M. D.

ABDOMINAL SECTION AS A MEDICAL MEASURE.—In a paper read before the Medical Society of London, Treves (British Medical Journal, March 5, 1898) reviewed those cases in which surgical measures in abdominal diseases appear to act upon the patient through other than surgical lines. There are cases in which the mere opening of the abdominal cavity appears to effect, in spite of all surgical prejudices, either cure of a disease, or at least its temporary amelioration. Prominent among these conditions stands tuberculous peritonitis. The results of the treatment of this disease by simple incision have been little short of miraculous, and show a percentage of 69.8 of cures, of which number 32.4 per cent. may be regarded as complete. Another series of cases are those in which a mere incision into the peritoneal cavity has led to rapid shrinking of certain malignant growths and to temporary improvement of the patient. Another group of instances in which relief unexpectedly followed abdominal section, with or without some further operative procedure, is illustrated by the large class of cases somewhat hopelessly styled nervous. These may be divided into two catagories: those in which the symptoms of well-recognized diseases are imitated and those in which the clinical phenomena are simply bizarre and fantastic. Where the symptoms of some well-recognized diseases are simulated operation for the disease and the removal of, for instance, a normal appendix, brings about a cure. The other cases are numerous in which the patients suffer great distress, in which it is impossible to give any name to the disease or to offer any explanation of the symptoms. It has been demonstrated that a great many of these are relieved, and, indeed, cured by abdominal section after all medical measures have failed.

There is a somewhat more definite form of abdominal trouble that the author imagines may lay claim to the term "intestinal hypochondriasis." Many of the patients who are the victims of this condition are men, mostly of middle age. Nearly if not all have been the subjects of chronic colitis. They are apt to complain of fixed pain and tenderness at a spot a little below and to the left of the umbilicus. The spot indi-

cated would not be far removed from the inferior mesenteric vessels and plexus. The patients suffer from troublesome constipation, from dyspeptic troubles, from sickening pain in the abdomen, and from indefinite depression. The whole mind is engrossed by the consideration of their bowels and the contemplation of the concerns of their abdomen. There is no doubt, from the study of these and similar cases, that the sigmoid flexure is a very irritable part of the alimentary canal. It is impossible that, in these cases, long-continued catarrh has led to a permanent state of irritability of the muscle forming the bowel wall, to a condition of abiding spasm, which may well cause pain and the sensations of obstruction. Various distortions of the colon and sigmoid have been observed by the author, and give rise to chronic constipation. Cases of idiopathic dilatation of the hollow viscera have been shown frequently to depend upon a stricture of their normal outlet, though they are often met with where no such condition is present. The term is too freely employed where a certain diagnosis has not been established.-Am. Jour. Med. Sci.

THE OPERATIVE SURGERY OF THE JOINTS.—In regard to operation on the joints, Marsh (British Medical Journal, March 5,1898) says there is an obvious parallel to be drawn between the joints and the abdomen in rgard to the results that have followed the introduction of asepsis into surgical practice. It is certain that it is just as safe to open the knee, or any other joint, as it is to open the abdomen, and that, as in the case of the peritoneum, so in that of the synovial membranes, the old view that these structures are in some way inherently unsuitable for operative treatment is erroneous.

As an illustration of the truth of this statement, he relates? the results which he has obtained in the open treatment of different joints for the various injuries. In operations for loose cartilages in the kuee-joint he prefers their removal to suture, and in all of the twelve cases operated upon the functional result has been perfect and the recovery afebrile

Loose bodies in the knee are also favorably operated upon, and two recent cases which he reports extensive manipulation was extremely well borne, with a perfect recovery and complete restoration of function.

Suture of the patella represents a test-operation by the open method in recent or old fractures. The results obtained appear to show conclusively that this operation has taken its place on the list of recent advances in practical surgery, and the evidence it affords as to the tolerance by the joints of active interference is sfliciently conclusive.

The general safety with which excision of the joints can now be performed is best illustrated by the results obtained in the case of the knee—the largest of the joints—and that in which an operation involves the most extensive wound of the soft parts, and the largest exposure of cancellous bone. Yet when care is taken to select appropriate cases,

primary union after excision of the knee is as certain to take place as it is after ovariotomy or removal of the appendix.

Operation in sacro-iliac disease the author believes to be as free from danger under aseptic conditions as is operating on the other joints, and he holds that excellent results can be obtained even where the disease, in this particular region, has advanced to a considerable extent. He illustrates the results obtainable by the histories of five cases where operation produced gratifying results.— Am. Jour Med. Sci.

MISCELLANEOUS.

A Few Points in the Treatment of Iritis. (Int. Med. Mag. Nov. '98.) Dr. Walter L. Pyle says when one was called to a recent case of acute iritis, the all-important procedure is to obtain full dilatation of the pupil. This puts the eye at rest, breaks up recent synechiæ and relieves and prevents pain and congestion. As long as the iris is attached at any point, all treatment is handicaped, and protraction of the case may be expected. First drop one drop of a four-grain-to-the-ounce solution of atropine in both eyes every ten minutes for half hour, after which, if the pupil in the affected eye remains undilated, cocaine in four per cent. solution should be instilled in that eye. only to render the cornea more porous, by separation of its epithelium. Then follow with three applications of one drop of the atropine solution heated, at five-minute intervals. Should the pupil still remain bound down, hot compresses should be laid on the eye for one or two hours with ten-minute intervals of rest, and if there be much congestion, three leeches should be applied to the temple of the affected side, and preparations made for diaphoresis. Atropine is again tried every ten minutes for half hour. In many cases the first application of atropine will dilate the pupil, but if the case is refractory, the additional measures will usually break up recent synechiæ. When the pupil is fully dilated, remnants of the posterior synechiæ may be seen as black pigment-spots on the anterior capsule of the lens. Full mydriasis should be continued as long as there are any signs of congestion, pain or cloudiness of the aqueous humor. This can usually be effected by one drop of the four per cent, solution of atropine, three times a day for the first week, or as long as pain and congestions are severe; after the violent symptoms subside, one drop daily is sufficient. If atropine becomes irritating to the patient and causes conjunctivitis, a boric-acid wash should be given, and hydrobromate of scopalomin, gr. I-I2 to one ounce, substituted.

One of the most troublesome symptoms is pain. Leeching, either by the natural leech or the Heurteloup apparatus, and hot, moist compresses for twenty minutes every hour, are the best routine measures to combat it. For two or three nights in succession the patient should be given a Dover's powder, a hot drink, a hot foot-bath, and be kept in perspiration under blankets for two hours. If the pain still continues severe, hypodermic injections of morphia, even in the temple if necessary, should be used; and sleeping po-

tions be given at night. The agony of pain and the nervous loss without sleep are great obstacles in the way of speedy convalescence.

The diet should be light but nourishing; milk and broths are preferable. The bowels must be kept open, if necessary, by salines such as citrate of magnesia. As most of the cases are of gouty, rheumatic or syphilititic origin, the iodides are very necessary, and should be pushed. Salol, salicylates and other uric-acid eliminatives are strongly indicated. The patient should be told of the connection of the iritis with the uric-acid diathesis, and warned against future judiscretions in diet.—Int. Med. Mag.

THE POINTS OF DISTINCTION BETWEEN CEREBRAL SYPHILIS AND GENERAL PARALYSIS OF THE INSANE. Hugh T. Patrick (N. Y. Med. Jou., Aug. 20, and Sept. 17, 1898, pp. 256, 403) points out that the resemblance of cerebral syphilis to general paralysis of the insane is well known, and the diagnosis between the two affections is not infrequently one of much difficulty. His paper should be read in the original, as a brief abstract can hardly do it justice. Only some of the most important statements can be mentioned in this review. In proportion as the somatic symptoms predominate we may suspect the existence of syphilis, while a preponderance of psychic symptoms indicates general paralysis. Brain syphilis, in the vast majority of cases, does not come on at a remote period after infection, but occurs early, even four weeks after the initial lesion. A cerebral disease has more chances of being syphilitic if it develops within five years after syphilitic infection; developing after ten years, unless indications of syphilis of the nervous system have been noted during this period, it is more likely to be general paralysis. Active syphilitic lesions in other parts of the body indicate that the cerebral disease is a part of the same affection, but a patient with dementia paralytica may contract syphilis, or many have distinctly luctic lesions from the infection which was the cause of the general paralysis. The gradual impairment of mental capacity with preservation of daily exercised mental functions, seen in general paralysis, is likely to be absent in syphilis. In the latter disease the clouding of the faculties is more uniform. In cerebral syphilis the symptoms may be suddenly aggravated or improved. In some paretics the incipient stage may be marked by mental eagerness and restlessness or exaltation of sexual instinct; symptoms which are not seen in syphilis. A predromal period of neurasthenic symptoms is in favor of general paralysis. Syphilis is of more rapid course than general paralysis. Destructiveness and filthiness may be early signs of syphilis. Delusions of grandeur are much less common in the early stages of general paralysis than is usually supposed, and they may occur in cerebral syphilis. Contentment and self-satisfaction are seen in both diseases. The presence of typical fatuous delusions without signs of gross brain affection is in favor of general paralysis, and if they presist without other forms of mental trouble the probability becomes certainty. The paretic is suggestible, while the leutic is apathetic or irritable. Contrary to what is believed by many, the paretic in the beginning of his disease is always aware of mental and physical disability. The mania in the two tliseases differs; in syphilis it is more violent without the delusions of grandeur and the rapid play of ideas that occur in general paralysis. The results of antisyphilitic treatment are not to be regarded as determining positively the nature of the disease in question,-Int. Med. Mag.

Therapeutic bints.

A RATIONAL TREATMENT OF SCROFULA LYMPH GLANDS.—R. Hammerschlag.—Instead of extirpation or the ordinary anti scrofulous treatment, the author recommends, especially for the poor, injections of iodoform emulsion. The latter must be made under strict asepsis, with the skin made tense and the glands prominent. The skin must be previously anæsthetized with Schleich's solution (cocaine mur 0.01, morph. mur 0.002, sod. chlor. 0.02,) one or two cc. of a 5 per cent. solution iodoform glycerin emulsion is injected once a week. Both of these solutions must be sterilized. If pus be present, this must first be aspirated with the syringe and then iodoform injection made through the same opening. When pus is not present, the injection is made into the hard glandular and periglandular tissue. No abscess results and the patient can go about his business.—

four. Eye, Ear and Throat Diseases.

Eczei	ma of the Scalp of Infants.—
B.	Acidi salicylici
	Zinci oxidi 5.0 (77.1 grains)
	Lanolini30.0 (7.7 drams)
M.	Ft. unguenti. Sig.—For external use.
Ŗ.	Unguenti diachyli Hebræ 25.0 (6.4 drams)
	Lanolini
	Hydrargri oxidi flavi o.25 (3.8 grains)
M.	Ft. unguenti. Sig.—External use.
"Dea	TH TO CORNS."—
Ŗ.	Ext. of cannabis indica
	Salicylic acid ro
	Oil of turpentine 5
	Glacial acetic acid 2
	Cocaine (alkaloidal) 2
	Collodion q.s.ad too
Μ.	

Apply a thin coating every night, putting each coating on top of the preceding one, until finally the whole drops off, bringing the indurated portion, and frequently the whole corn, with it.

—National Druggist.

PRESISTENT DIARRHEA IN CHILDREN.—In the February number of *Pediatrics* nitrate of silver is recommended for this complaint, given as follows:

Argent nitrat	gr. i.
Ac. nitric. dil	m. v.
Mucilag. acaciæ	q. s.
Syr. cort. aurant	x iv.
Dose, one dram t. i. d.—N. A. Practi	tioner.

PRESCRIPTIONS FOR ACNE.—The following prescriptions are given in the Klinische Therapeutische Wochenschrift of June 15, 1898.

Pure resorcin, ½ drachm; Zinc oxide, 40 grains; Terra silica, 7 grains; Benzoated lard, 2 drachms. Apply to the part twice a day.

Or,

Beta-niphthol, 2½ drachms; Precipitated sulphur, 2 ounces; Vaselin and soft soap, of each 1 ounce.

This is to be rubbed on the face for fifteen or twenty minutes daily and afterwards to be removed and the part dusted with talcum powder; or we may use:

> B Precipitate ointment, 1 drachm; Subnitrate of bismuth, ½ drachm; Ichthyol, 30 grains; Vaselin, 6 drachms.

Apply at night.

-Therapeutic Gazette.

FIRST CARE OF A BABY.—Hanson is one of those who believe that the baby who is started right stands a much better chance to grow up well and strong than if allowed to catch cold or get indigestion within the first few hours of life. He insists upon the following simple rules as being all important: (1) Do not expose the baby after birth to a greater change of temperature than is absolutely necessary. (2) Do not allow attendants to subject him to prolonged exposure while washing, but rub him over with lard (this usually being convenient), and quickly wipe him off and wrap him up warmly. (3) Do not use too fine a thread in tying the cord, and dress the same with dry, sterile

dressings. (4) Give nothing but tepid water or some very weak aromatic tea until there is sufficient milk in the mother's breast for the child's requirements. (5) Notice the clothing and see that the abdomen and chest are not constricted thereby.—

Pediatries.

HEMATEMESIS AND HEMOPTYSIS: DIFFERENTIAL DIAGNOSIS. -

Hæmatemesis.

- 1. Previous history points to gastric, hepatic, or splenic disease.
- 2. The blood is brought up by vomiting, prior to which the patient may experience a feeling of giddiness or faintness.
- 3 The blood is usually clotted, mixed with particles of food, and has an acid reaction. It may be dark, grumous, and fluid.
- 4. Subsequent to the attack the patient passes tarry stools, and signs of disease of the abdominal viscera may be detected.

-Medical Record.

Hamoptysis.

- 1. Cough or signs of some pulmonary or cardiac disease precede, in many cases, the hemorrhage.
- 2. The blood is coughed up, and is usually preceded by a sensation of tickling in the throat. If vomiting occurs, it follows the coughing.
- 3. The blood is froth y, bright red in color, alkaline in reaction. If clotted, rarely in such large coagula, and mucopus may be mixed with it.
- 4. The cough presists, physical signs of local disease in the chest may usually be detected, and the sputa may be blood stained for many days.

-OSLER.

Motes and Items.

THE PHILADELPHIA POLYCLINIC, the excellent little journal published by the Medical School of the same name, will on January 1, 1899, be merged with the *Philadelphia Medical Journal*. This makes two very good journals that have been absorbed by the *Phil. Med. Jour.* in its short life of little more than one year.

WARING HOSPITAL.—The Chamber of Commerce of New York City has decided upon a memorial in honor of the late Colonel George E. Waring, Jr., to consist of a fund of \$100,000, for the benefit of Colonel Waring's widow, with some provision for the

creation, on her death, of a permanent memorial in testimony of his sterling worth and integrity, and the conspicuous services he rendered to his country and especially to New York City.

—Philadelphia Medical Journal.

SMALL-POX IN CUBA.—General Wood, commanding at Santiago de Cuba, sent on October 6, a cable dispatch to the Central

Cuban Relief Association, which reads:

"I find in the Holguin district, just evacuated by Spaniards, long standing small pox, scattered throughout the district, and am making every effort to stamp it out. Dr. Woodson, of the Army, is in charge of the work. Please send him to Gibara by first Government transport one thousand cots and two hundred half-ounce bottles of vaccine lymph." Small pox has been raging for some time in this section with no effort having been made to check it. Vaccine has been sent and we will now have a forcible illustration of its value.

THE PHYSICIAN AND THE DOCTRINE OF THE RESURRECTION. -"I confess that for my own part the prospect opened to the medical man by this suggestion of the Bishop of London is not merely marvellous but appalling. Have we not responsibilities enough thrust upon us here by patients and their friends, by our profession, and by the public as represented by the featherbrained 'New Journalism,' without having to look forward to a further criticism of our handicraft at the resurrection? If the marks of our skill are stamped on our patients' frames, will not the marks of our bungling be stamped equally deep and carried like the others into eternity? A great oculist confessed in an ungarded moment that he had destroyed a hatful of eyes before he had acquired the skill which made him a successful operator. Fancy his feelings on meeting the owners of those eves in the sweet by and bye! And the victims of the "triumphs of surgery" -will they rise in judgment against the operators, sans stomach or intestine, sans womb or Fallopian tubes or ovaries, sans spleen or kidney or liver or bladder? The Bishop of London has added a new terror to medical practice."—The Practitioner.

A SAMPLE OF NERVE.—An amusing tale is told by a country doctor in England. He had been attending for a considerable period a parson, and according to custom, now fortunately becoming antiquated there, attending him gratis. When in due course the parson died, his widow wrote to inquire how much the doctor would allow her for the medicine bottles.

This reminds us of an actual occurrence which we think caps the climax for monumental cheek. A certain mother whose baby was taken ill during the night proceeded to the house of a nearby physician and aroused him from his well-earned slumbers to request the favor of using his telephone to call up her family physician. This being allowed, and the distant doctor having prescribed a dose of paregoric for the baby, the thrifty mother calmly asked the other physician to kindly provide her with the necessary medicine. The doctor was so overcome with admiration of this superlative nerve that he complied with her request, and considered himself fortunate to get off so cheap.—The Doctor's Factotum.

Reading Motices.

E. N. CAMPBELL, M. D., Good Hope, Ill., says: I have used Aletris Cordial in threatened miscarriage and find it one of the finest and most efficient preparations that it has been my privilege to prescribe. Aletris Cordial should be used more than it is, although it is largely prescribed, yet like its twin sister Celerina, it is not prescribed often enough to prove its efficiency. Most all cases that these preparations are used in are a of chronic type, and those that require patience to relieve; hence, if these two remedies are taken regularly and presistently, according to the case, they will satisfy all concerned.

THE TREATMENT OF TUBERCULOUS LESIONS OF THE SKIN. -Among the remedies recommended for the treatment of tuberculous lesions, whether of the lungs, the joints, the glands, or the skin, iodine or its preparations, especially iodoform, is gaining in popularity. Iodoform, however, has so many disadvantages that it can be anvantageously replaced by europhen which is also an iodine derivative, but free from the objectionable features of iodoform, such as offensive odor, irritating and toxic Europhen has proved of marked value in the treatment of cutaneous affections of tuberculous origin, such as lupus, scrofuloderma, etc. Lupus vulgaris has been successfully treated by inunctions of europhen in oil of a strength of 5 per cent and some time ago Dr. De Witt, of Cincinnati reported a remarkable case of what he termed tuberculosis verrucosa, in which the application of the drug in this manner, together with its internal administration in doses of one grain, three times daily, not only produced a cure of the cutaneous disease which had resisted the action of other remedies, but also materially improved the complicating tuberculous condition of the lungs It is also of interest to note in this connection that Dr Goldschmidt, of Medeira, has obtained decided curative results from the use of europhen in cases of leprosy. That europhen has a specific action upon the tubercle bacillus is shown by the increasing number of cases reported in the medical press, in which its application to the skin in conjunction with its internal administration has effected marked improvement, or even a cure, in pulmonary tuberculosis.

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ACUTE OSTEOMYELITIS.*

By H. A. SIFTON, M. D., of Milwaukee.

BEFORE the commencement of the last century no disease had been described which could be recognized as inflammation of bone. About that time Petit detailed a number of cases of acute inflammation of the long bones, which was undoubtedly what we now designate as acute osteomyelitis. A number of surgeons have since written on this disease under various names as osteitis, medullitis, endostitis and psuedorheumatism—until in 1834 the term osteomyelitis was suggested by Nealton, from which time it has been usual to describe the disease under this title.

The first form of the disease to be recognized and described was the traumatic variety accompanying any form of injury to the bone. The relation of this form to so called spontaneous inflammation of bone was not clearly understood until the days of Pasteur, since which time it has been known that they are one and the same disease, and are both due to pusproducing germs. The only difference is in the mode of introduction of the infecting material.

Recognizing then the fact that no matter in what form the disease may appear (it is always due to infection by one or more varieties of pus producing germs), we have only to consider in our study of the etiology the mode of introduction and

^{*}Read before the Wisconsin Medical Society, 1898.

the resistance of the tissues to infection. The disease commences, as the name implies, in the medullary tissue and those bones which have the greatest amount, as the tibia and femur, are most frequently attacked. It usually begins near the ends of the bone where the cancellous structure is greatest.

It is much more frequent in children and young adults whose bones have relatively a larger amount of medullary substance than later in life. It commences near the epiphyseal line where new bone is formed, and the blood-vessels are undergoing change. This new growth of blood-vessels, together with the anatomical fact that the capillaries of the bone are in many instances larger than the arteries that supply them, and that in places they are devoid of walls, being rather channels in the cancellous structure, make the best possible conditions for the lodgment of pathological germs.

In the traumatic form in which there is an open wound, the infection is conveyed directly to the cancellous structure. But where there is no open wound it has been thought that in a few cases the channel of infection was through the lymphatics. This is difficult of demonstration, and probably not correct.

In the great majority of cases, perhaps all, the infection is carried through the medium of the blood-vessels. This is evidenced by the fact that the great majority of cases follow scarlet fever, diphtheria, typhoid fever, middle-ear suppuration, or other infective processes—the conditions in which we would expect to find infective germs in the blood.

As predisposing causes we have any condition which will lower the resisting power of the body, exposure to cold, poor food, bad ventilation, etc.

A clinical picture of acute osteomyelitis is the same as of any other acute suppurative inflammation modified by being surrounded by bone. This accounts for the excessive pain. Pain is one of the first symptoms, often appearing before the chill. It is of a peculiar excruciating, boring, throbbing character. It is always present except in cases of profound sepsis, in which the patient passes into stupor and collapse. It is usually not limited to the point of infection, but may be referred to a neighboring joint or through the whole length of the bone infected. In other words it may be referred to any part of the distribution

of the nerve which supplies the point of disease. The pain will correspond with the amount of tension and seems at times to bear a relation with the height of temperature. As the tension increases, corresponding to the pouring out of the exudate, the pain increases, until the surrounding bone is perforated and the inflammatory products escape into the soft tissues, when it immediately becomes less.

The location of the pain should always be studied carefully, as it is one of our best guides to the point of disease.

Tenderness over the point of disease is always present and by its careful study we are enabled to locate the tissues involved. The point of greatest tenderness is where the disease is nearest the surface, and the place at which we open the bone in an early operation. Tenderness is seldom or never absent.

Swelling may be absent during the first few days of the disease, or until such time as the soft tissues become involved, when it extends very rapidly involving all the surrounding tissues, giving the feeling of deep-seated fluctuation. It is very liable to extend to tissues at a distance from the starting-point, even involving the whole limb. This is due to the direct involvement of the veins, producing thrombosis and extension along their channel.

In neglected cases the involvement of the soft tissues is often very extensive, separating the muscle-planes, and most frequent of all, separating the periosteum from the bone so that the entire shaft may be denuded and surrounded by pus.

Involvement of a neighboring joint may take place. It is liable to be simple in the early stages of the disease, while in the latter stages it is more often septic and then becomes a very serious complication. The nearer the joint the original focus, the more danger there is of the joint becoming involved. The temperature is usually high in the commencement, showing great variation as it does in all acute suppurative processes.

The pulse varies with the temperature, and is the best indication of the amount of infection, being rapid and weak when it is great, regardless of temperature.

The pathology of the disease has already been suggested, in that it attacks the long bones most frequently, but may attack any bone. Beginning in the cancellous structure it quickly destroys the tissues involving all the structures, blood vessels, nerves, and bone, extending in the path of least resistance, so that the entire central canal may be involved before it breaks through the more solid outer layers of the bone. When it does so it at once strips the periosteum from the bone, often to the entire extent, thus destroying the nutrition of the denuded portion, which dies and forms so-called sequestrum. The inflammatory material breaking through the periosteum involves the soft tis sues, as before mentioned, and eventually opens the surface, affording an exit for the pus.

If the patient has sufficient resisting power and develops immunity to the toxines of the disease, repair will begin and new bone form on the inner surface of the separated periosteum, forming a complete incasement to the necrosed portion, making the so-called involucrum, which is usually much more dense than ordinary bone, but is occasionally found to be porous with large cellular spaces. This involucre in time will become so strong as to bear the weight of the body, being perforated in one or more places, which correspond to the openings in the periosteum that afforded exit to the pus and communicates with the surface of the skin.

In a few cases the whole thickness of the bone will be destroyed before any new bone has formed resulting in a so called fracture. The necrosed bone lies in a cavity surrounded by granulations on the inner surface of the new bone.

In the majority of cases there is no difficulty in making a diagnosis if care is taken, but in a few cases with the greatest care mistakes are made.

The septic condition induced by the disease is most likely to be mistaken for typhoid fever. So closely do they resemble each other at times that the most experienced have been mistaken and the condition only made out postmortem.

When once a diagnosis is reached the same principles guide us as in all septic conditions. Remove all the infected material if possible; if not give it free exit by drainage. In the majority of cases the process can be cut short by a timely operation. A case that would undoubtedly destroy the greater part of a long bone, and, perhaps, the patient's life, may be ended by the removal of a very limited amount of tissue. In such early operations, where there is only a limited amount of structure involved, repair will quickly take place and without damage to the functions of the bone affected.

But if destruction of bone is great, as in cases of long standing in which there is formed an extensive involucre surrounding a large piece of dead bone, perhaps the whole shaft of a long bone, the cavity, after removal of the diseased tissue, will be very large. If the large cavity is left to itself it will be long in filling up.

Many methods have been adopted to shorten this time, such as filling up the cavity with bone-chips. This would be of great value if the cavity could be made aseptic, which usually is not possible. Perhaps the most useful method is the covering of the floor of the cavity by a skin flap after healthy granulations have formed. Making an osteoplastic flap of one side of the involucre so as to displace in into the cavity has been tried, and in cases in which it is possible will give the best results.

The cases are very variable, and in each one the mechanical conditions must be met on its own merit.

A case which I present here may illustrate some of the points mentioned. His history is in brief as follows:

About two years before he first came under observation he had what was undoubtedly an ordinary attack of osteomyelitis of the tibia, which, being neglected, after a time opened on the surface and continued to discharge from a number of sinuses. A short time before, his clavicle was attacked in the same way. A portion of the involucre which surrounded the tibia was incised and the entire shaft removed. No attempt was made to fill up the enormous cavity left. The dead bone in the cavicle and sternum was simply curetted away.

About six weeks after the operation on the leg, he had an acute attack of osteomyelitis affecting the humerus, which was at once opened and the diseased medullary structure removed. This cut short the attack without loss of substance more than about three inches of the cavity of the bone.

Some time after he had still another attack affecting one of his ribs, which was dealt with in the same way.

This ended the active manifestations of the disease.

In this case we have first to consider the result of neglect in the destruction of the long bone, the involvement of secondary centers which were promptly relieved by timely oper-

ations, and finally we see what nature can do in repairing and overcoming such a defect as was here manifested.

The cavity was nearly two years filling up.

INFECTIOUS JAUNDICE.*

By W. H. WASHBURN, M. D., of Wilwaukee, Professor of Principles and Practice of Medicine and of Clinical Medicine in Wisconsin College of Physicians and Surgeons; Physician to St. Josephs Hospital;

Pathologist to Johnston Emergency

Hospital.

HE importance of the liver in the animal economy has always been sufficiently recognized. Its great size, in proportion to the other glandular structures of the body was alone sufficient to warrant for the conclusion that its officers were of great consequence. But it was for a long time supposed that its most important function was the part it plays in the processes of digestion. With the development of our knowledge in physiology, however, the fact was soon established that while the bile does aid in the emulsification of fats, it has no action at all upon the nitrogenized food-elements, or upon carbohydrates, and hence the part played by the bile in the digestion of food is an exceedingly small and comparatively unimportant one. More important by far are its assimilative functions, in the discharge of which it modifies nearly every product of digestion that is brought to it from the gastro-intestinal canal by the portal blood. And not only does it do this, but it also acts upon, modifies and changes such secondary substances as leucin, tyrosin, lysin, lysantonin, etc., which are brought to it from the intestinal canal, transforming them into urea, or possibly, as in the case of the amido acids, converting them into other and more complex substances.

^{*}Read before the Wisconsin State Medical Society, 1898.

The glycogenic function of the the liver is also to be mentioned in connection with its assimilative functions.

This organ, standing like a sentinel at the portals of the general circulation, exercises also a protecting influence against the introduction into the body of any deleterious substance. The fact has long been commonly known that most drugs administered by the stomach are demanded in larger doses than when administered hypodermically, and the reason of this is, in part, that in passing through the liver the active principle of the drug is partially neutralized. This is particularly true of such vegetable poisons as morphin, strychnin, etc. past few years the fact has been fairly well established that the liver plays a very important part in recovery from acute infectious diseases, removing from the blood and conveying to the intestinal canal micro organisms and their products. Its offices in this connection are particularly to be noted with respect to diseases which specially involve the gastro-intestinal canal, as typhoid fever, where the pathogenic micro-organisms are in close relation with the radicles of the portal system. diseases micro organisms are, not uncommonly, separated from the blood by the liver-cells and carried in the bile-current into the intestinal canal to be eliminated from the body in the fecal evacuations.

Besides those functions of the liver, it plays a part as an excretory organ which is an exceedingly important one, and as such its offices are not confined to the excretion of pigments formed from hemoglobin, but extends to the elimination of bilesalts and cholesterin, certain drugs and poisons, as well as some of the poisonous by products of digestion.

This very brief and crude statement of the offices of the liver indicates that its functions are extremely numerous, varied, and complex, and we are accordingly to conclude, a priori, that upon the efficiency with which its functions are performed will the health of the individual largely depend.

In view of the very frequent occurrence of infectious processes in the animal body, and the part played by the liver in the elimination of infectious materies, affections involving this organ, in the course of such diseases, are not infrequent events. We thus have jaundice occurring in the course of malarial fevers, pyemia, typhoid fever, typhus fever, scarlatina, in which cases the symptom is due to a consequence of events in the liver analogous with what occurs in the kidneys in connection with the same diseases.

CASE 1.-C. J. L., aged 24 years, in the fall of 1891 had an attack of typhoid fever which ran an uneventful course until complete defervescence had occurred. The duration of the febrile period was twenty-two days. After a period of apyrexia of four or five days duration there was a slight chill with a rise of temperature, the mercury reaching 1037° F. within twenty-four hours. This occurrence gave rise to the fear that a relapse had begun. In the meantime the skin and conjunctivæ exhibited a slight greenish yellow discoloration, and the patient complained of tenderness on pressure over the liver, which was sensibly increased in size. The jaundice deepened. though it was not intense at any time, and bile was present in the facal evacuations throughout. The symptoms gradually subsided and the temperature became normal at the end of six days, the jaundice disappearing soon thereafter.

CASE 2.-Miss C. C. W., aged 29 years, in February and March, 1892, had an attack of typhoid fever in which the pyrexial period was of twenty three days duration, there occurring no complications or unusual events. On the eighth day after the temperature had remained normal throughout the twenty-four hours there was a slight chill followed by a rise in temperature to 101.8° F. Jaundice developed within the next twelve hours, the discoloration being of moderate intensity. There was decided increase in the area of hepatic dullness and the tenderness on pressure over the liver was so great that for a time the formation of an hepatic abscess was feared. evacuations showed the presence of bile in the intestinal canal, and there was but slight evidence of the presence of bile pigments in the urine. The whole disturbance gradually sudsided, the tenderness disappeared, the liver returned to its normal size. the skin assumed its normal color, and the pulse and temperature were natural at the end of a week.

CASE 3.—Mrs. S. This woman was a patient of Dr. P. H. Jobse, to whom I am indebted for the notes of the case. She was admitted to the Presbyterian Hospital in August, 1897,

an operation for the radical cure of a hernia. Operation per formed on August 25th, at 7:30 o'clock A. M., patient in good condition. Complained excessively of nausea following the operation and on the next day. Temperature on the 26th rose to 101.2° F., vomiting continued. On the 27th the vomiting continued and the patient was observed to be jaunaiced. The mind became dull and by the 28th the patient was delirious and having involuntary evacuations from the bladder, the bowels being constipated.

The administration of calomel resulted in the evacuation of excessively tetid feces. Fearing infection through the wound, the stitches were removed but the wound was found to be perfectly healthy and aseptic. On September 4th, the temperature was again normal, and the skin had nearly regained its natural color. The bowels, had, in the meantime, been unloaded of an immense amount of excessively fetid fecal matter which showed, however, the presence of bile in the intestinal canal.

CASE 4.—Mrs. R. E. A., aged 22 years, was taken sick December 11, 1897; there was a marked chill with a rise of temperature to above 105° F. The cause of this explosion was found to be a miscarriage at the third month. The fetus was in an advanced stage of decomposition. Patient removed to the Presbyterian Hospital where the uterus was thoroughly emptied and irrigated, The temperature rapidly fell to the normal, where it remained for twenty four hours. At the end of this time another chill occurred, and the temperature rapidly shot up to above 106° F. Fearing that there was a further nidus of infection in the uterus, this organ was thoroughly curetted, irrigated and packed with iodoform gauze, sufficiently loose to provide for perfectly free drainage. Scarcely any reduction in temperature followed this procedure, and the gravest fears were entertained as to whether the uterus were not itself involved in an infective process. About this time it was noticed that there was a yellowish-green discoloration of the conjunctivæ and skin, of only moderate intensity.

There was slight increase in the area of hepatic dullness with well marked tenderness on pressure. The fecal evacuations contained bile throughout. The temperature ranged from 103° F. to 105° F. for four days, at the end of which time it

rapidly fell to the normal with coincident amelioration in all the other symytoms and the disappearance of the jaundice.

CASE 5.—Mr. J B., aged 41 years, farmer. This case was seen in consultation with Dr. H. A. Albers who very kindly allowed to use his notes of the case. This patient, in previous good health and of good family history, was taken sick on January 23, 1898. The symptoms were rather indefinite at first. The temperature ranged above 102° F., and jaundice appeared in the course of a few days and this symptom became a marked feature of the case. The liver was increased in size, as was also the spleen, there being slight tenderness on pressure over the Delirium and subsultus tendinum developed about the eighteenth day of the disease. Bile was present in the stools at all times during the course of the disease. Improvement became very marked on February 19th; the liver decreased in size as did also the spleen, the jaundice nearly disappeared, temperature became normal, and the patient was up and about the house. On March oth there occurred a chill, with a return of fever, the temperature reaching 103° F., and above, the jaundice rapidly returned, accompanied by delirium and increase in the area of hepatic dulness. The case ended in death on March 17th.

Unfortunately it was not possible to secure an autopsy so that the real morbid conditions in the abdominal cavity can never be absolutely known.

CASE 6.—Mrs. J. I., aged 49 years. This patient was taken sick on April 4, 1898, with an attack of pseudo membranous enteritis, a disease from which she has suffered several attacks within the past four or five years. On April 6th she had a chill of short duration, which was followed by a rise in temperature, the mercury reaching 102.8° F., within a few hours. At the time of my first visit a distinct yellowish discoloration of the skin was observed, and this color deepened until the jaundice became very well-marked indeed, almost intense. There was some pain in the right hypochondriac region which was increased on pressure, but there was no appreciable increase in the size of the liver. Bile pigment appeared in the urine for a few days, though in comparatively small amounts, and the fecal evacuations did not at any time show the entire absence of bile in the intestinal canal. The primary disease, the pseudo-

membranous colitis, lasted three days, but the jaundice presisted for more than a week after the complete disappearance of the intestinal disturbance, the temperature remaining above ror F. for all this time.

These cases illustrate fairly well the most essential features of the form of disease under consideration, both as to etiology and clinical history.

The jaundice in these cases was rather mild, except in the case that ended fatally, and in that case the jaundice reached a degree commonly attained in the jaundice of obstruction. The mildness of the jaundice in these cases would seem to indicate that only a part, and possibly only a small part, of the bile secreted was absorbed, the result being a more or less marked yellowish discoloration of the skin and conjunctivæ. That only a part of the bile was absorbed into the blood is further established by the fact that bile appeared in the fecal evacuations of all these patients, and there was but a very slight indication of bile pigment in the urine. These points are in striking contrast with the clinical characters of jaundice from obstruction of the common duct, either as a consequence of the impaction of a gall stone, or from ascending catarrh from the duodenum.

Moreover, in all these cases there was another feature which was in striking contrast with the jaundice of obstruction, and that was the very decided constitutional disturbance that developed. In the mildest forms of infectious jaundice, there may be so little constitutional disturbance as to be scarcely observable, and such a case might readily be indistinguishable from catarrhal jaundice of intestinal origin.

But while this may be the case in exceptional instances, constitutional disturdance is a very marked feature of the disease.

CASE 3 represents a rather mild form of the disease so far as constitutional symptoms are concerned, while Case 5 represents the most severe, being characterized by fever, dry tongue, subsultus tendinum, delirium, in fact the "typhoid state," and terminating in death.

As to the etiology, it may be said that in the majority of cases there is evident disturbance in the intestinal canal, as is indicated by diarrhea or extreme fetor of fecal evacuations, but in some cases the seat of the infection is not so well established. In the cases here detailed no seat of infection could be determined in Case 5, and in Case 4 the uterus was the seat of infection, apparently, rather than the intestinal canal.

The pathogenesis of this form of disease has been studied somewhat extensively in recent years and what has been determined seems to warrant the conclusion that the infectious material in its passage through the liver and especially in its passage through the bile-ducts, is the offending substance; that by its presence in the bile-ducts or in the capallaries about the bile-ducts, an angiocholitis or a periangiocholitis is initiated. As a consequence of such inflammation the caliber of the bile-ducts is lessened, and the bile itself is rendered unusually viscid, and hence it results that there is an obstruction to the outflow of the bile. As a result of this combination of circumstances we have absorption of some bile and consequent jaundice, while at the same time bile appears in the fecal evacuations.

This is a pathologic process which is, in many respects, similar to what takes place in the kidneys in certain infectious diseases in which the morbific materies is specially injurious to these organs, as diphtheria, and measles.

Some writers have thought that jaundice as it occurs in connection with such diseases as have already been mentioned, should be distinguished from that which arises in such an independent manner as to be regarded as almost specific, as "Weil's disease," "epidemic," "febrile," infectious," or "malignant" jaundice, and acute yellow atrophy of the liver. Yet when due regard is paid to all we know of the etiology and pathology of these various diseases, there appears no sufficient ground upon which to base such a distinction.

The gradation between the mildest and the most malignant of these cases is such as to merely indicate that there is a corresponding gradation between the virulence and amount of the morbific agent operative in each case, but there are no clinical or pathologic facts warranting the conclusion that there is any essential difference between them.—Official Transactions.

PRACTICAL POINTS IN THE OPERATIVE TREAT-MENT OF HERNIA.

By Southgate Leigh, M. D., Visiting Surgeon St. Vincent's Hospital and Retreat for the Sick, Norfolk, Va.

THE subject of hernia occupies too broad a field of surgical literature for me to attempt a systematic review in a brief paper. I shall therefore confine myself to a description of the operative details which have completely revolutionized this department of surgery, in the past few years, and refer to some points which I myself have attempted to develop further. In the light of our recent knowledge and experience I can safely make the following assertions:

- 1. Every uncomplicated case of hernia is curable.
- 2. The operation of herniotomy is practically devoid of danger.
- 3. There is less danger in operating than in not operating.
- 4. The time required for a cure is short, and the patient suffers but little discomfort.
 - 5. There are no recurrences.

In the past few years many radical changes have taken place in the surgical treatment of hernia.

Only about six years ago, no less an authority than Prof. Bull, of New York, in an extensive review of this subject admitted frankly that a large proportion of his cases in this line had failed on account of recurrences. At the present time a recurrence should never take place, if the operation and after treatment are properly and thoroughly conducted. This revolution has been brought about almost entirely by the introduction of Kangaroo tendon, and the Bassini method of operating.

My remarks will refer chiefly to the ordinary forms of inguinal hernia, other varieties being but briefly touched upon.

The Bassini method or some modification of it, is now almost universally employed, to the exclusion of the older procedures. It is a most rational operation, restoring the parts approximately to their normal condition. If thoroughly performed, my experience is that the abdominal wall is made thicker and stronger than that on the unaffected side. The operation makes a new

^{*}Read before the Seaboard Medical Association, Virginia Beach, July 1898.

spermatic canal and leaves a strong double wall of resistance against pressure from within.

I believe that the secret of success lies in the use of properly prepared Kangaroo tendon. A suture material which remains unabsorbed long enough to enable the new structures to become thoroughly and lastingly united. I cannot too highly recommend the tendon prepared by Van Horn & Co., of New York City. It has given me perfect results in every case. And its sterility has been demonstrated to me not only by use in all my cases, but also by a personal inspection of the laboratory and the materials employed in its preparation.

In performing the Bassini operation the most perfect antiseptic precautions must be observed. No drainage is used, and the slightest error might be fatal. I know of no operation in surgery which demands such absolute cleanliness: but with this extreme care the results are most gratifying.

Not only the operator, but each and every one of his assist ants must observe these antiseptic precautions before, during, and after the operation. And let me here say that in my opinion success in all kinds of surgery depends very much more upon painstaking care and strictest attention to detail than upon the ability to make a brilliant dissection.

Thoroughness and caution should be the watchword of the modern surgeon.

Operations appear so easy nowadays, that the profession is rushing recklessly into surgery, and it is not until checked by some disastrous result, that the careless surgeon is warned against needlessly meddling with human lives. It is indeed a serious responsibility that is laid upon us. Yet with a full realization of the danger of carelessnes, and the most extreme watchfulness as to the proper conduct of everything connected directly and indirectly with an operation, we can feel that modern surgery is absolutely safe, and is to be trusted.

As I stated before, no operation in surgery requires greater care than the one under discussion, and none yields more perfect results. *Properly conducted it is absolutely safe*.

The skin must be closely shaved, and rendered sterile by antiseptic wet dressings for 24 hours before the operation. The patients bowels, freely moved for a few days before are completely emptied in the usual way on the day of operation. The skin incision should be free, and in the line of the hernia, extending down on the scretum if need be. This exposes the hernial sac and aponeurosis of the ext. oblique. The latter must be divided externally as far as the internal ring. The next step is to seperate the sac from the cord. The sac is then opened. Solutions changed to sterilized water, and the intestines replaced if contained in the sac. The omentum is tied off in sections with silk ligatures and the sac fastened up. This is best done with a double ligature of Kangaroo tendon, which pierces the neck of the sac is crossed in the middle and tied in two parts. The sac is then cut off. Varicose veins of the cord if any exist must be removed. The next step is the restoration of the inguinal canal. The posterior wall is formed by suturing the conjoined tendon and arch above, to the post edge of poupart's ligament below, with three or more heavy Kangaroo tendon A short full curved needle with smooth edges is best sutures. adapted for this purpose. Care must be taken not to pass in too deeply for fear of wounding the bladder or intestines. Sutures must be tied firmly but not too tightly, else they will cut the tissues through. The opening around the cord at the internal ring should be made small.

The next step in the formation of the anterior wall of the canal. For this purpose, the smaller Kangaroo tendon sutures are the best. The edges of the aponeurosis of the ext oblique are united over the cord leaving a small apening for its exit at the Pubic bone. Thus a double wall of strong resisting tissues has been formed to take the place of the hernial opening.

To further thicken this wall, I am in the habit of putting two or more deep catgut sutures into the subcutaneous tissues to bring them in a opposition. The skin wound should be closed with catgut sutures, and placed far enough apart to allow exit to serum that may collect before the dressings are applied.

While suturing the wound I have my assistant make sponge pressure to prevent any accumulation of fluid in the wound. A strip of prepared rubber tissue in then applied, followed by layers of iodiform gauze. The next step in the dressing is one peculiar to myself. I take the soft sea sponges which have

been used in the operation, split them, and apply them over the line of the wound. The more iodiform gauze, plain gauze, cotton and bandage. The latter is made to include the scrotum. I use a peculiar bandage which I term "perineal bandage." It is applied with a broad roller bandage and started like a spica of the groin, but instead of bringing the bandage back under the same thigh it is carried under the thigh of the opposite side, thus making pressure and enveloping the entire scrotum. I believe in thorough bandaging and considerable pressure well distributed. I usually apply also a starch dandage, to insure a better retention of the dressings.

I have entered thus fully into the details of the dressing because I consider its importance to be even greater than that of the operation itself. To get a perfect result all free spaces must be obliterated from the wound, and no accumulation of blood clots allowed. This I accomplished by sponge pressure during the suturing, and by sponge and Landage pressure while the dressings are being applied. The tightness of the dressing absolutely prevents any separation of the deep parts of the wound afterwards.

The patient is kept perfectly quiet and on fluid diet for three days following the operation. There is no pain of any eonsequence, and the only discomfort is from the tightness of the bandage. The bowels are moved by Enema on the third day. The first dressing is done a week after the operation when the wound is found to be entirely healed.

The patient is kept strictly in bed for at least a week more. I generally employ a supporting bandage for two or three weeks after he leaves the hospital, to guard against any strain upon the new tissues.

This is the brief history of practically every case in which I have employed the Bassini operation and its modifications. I have had only one recurrence, and that was in the case operated on by the open method. My herniotomies number 63.

I have used Kangaroo tendon and the Bassini principle in every case that I could.

I have had but two deaths and both of these were cases moribund from prolong strangulation. I have seen no bad effects whatever and no danger from the operation; and no recurtence when the proper method could be employed.

In strangulated hernia, inguinal or femoral, the first requirement is to relieve the immediate danger.

The radical operation should not be performed unless there is the certainty that the patient will be able to stand the prolonged anæsthesia. It the circulation of the gut appears doubtful it should not be returned into the abdominal cavity, but be left in the open wound. This method I have adopted in four cases with good effect. I made a large opening through the entire thickness of the abdominal wall and left the most suspicious portion of the gut at the bottom of the wound, retained by a thin packing of iodoform gauze around it, sterilized rubber tissue in strips over the gut and loose gauze and a tea strainer to prevent harmful pressure. Twelve hours later, in each case, examination showed that the circulation had been restored. The packing was carefully removed and the gut pushed into the free peritone il cavity, the wound being packed with iodoform gauze.

One very severe case was so badly strangulated that all of the layers of the wall of the gut were cut through at one point except the serous layer, and even in this case the circulation returned.

A few days later I sutured the deep tissue together as best I could, with kangaroo tendon, and closed the skin with catgut The result both immediate and remote was perfect in each case.

In the light then of our present knowledge and experience we can safely advise, indeed it becomes our duty to urge, such a man to submit to the radical operation on the Bassini principle. We can promise him that he will have hardly any pain and not much discomfort. And that the danger if any exist, is much less than he is running every day of his life. Finally we can be safe in asserting that after a properly conducted operation, there will be no recurrence of the troublesome condition.

NORTH CAROLINA MEDICAL JOURNAL.

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All communications, either of a literary or business nature, should be addressed to, and any remittances by P. O. Order, Draft or Registered Letter, made payable to ROBERT D. JEWETT, M.D., Winston, N. C.

Editorial.

ANNOUNCEMENT.

With the present issue the Journal completes its twenty-first year. During this time it has exerted its best efforts to promote the interest and uphold the dignity of the profession, especially that of North Carolina. To the Journal, through the presistent and untiring exertions of its distinguished founder, is due, in large measure, the growth of the State Medical Society, and along with that, the enactment of good medical laws in the State. In these twenty-one years it has never failed in its monthly and semi-monthly visits to its readers, publishing to the world a partial record of the work done by North

Carolina physicians and surgeons. To it, more than to any other factor is due what the world knows of the part that is being taken by the profession of this State in the making of medical history. The fact remains, however, that North Carolina doctors do not write as much as they should and we trust that with the organization of new societies they will be stimulated to better things in the future,

Since assuming the management of the JOURNAL the present editor has, from time to time, made such changes in it as would, in his opinion, increase its usefulness. With this idea in view we have deemed the present time, when the JOURNAL is entering upon its majority, proper for the most important step forward that has yet been made-one which we have been contemplating some time. The work of conducting the editorial and business management of the JOURNAL has grown to be too much, if thoroughly done, for one man, even were his whole time devoted to it. Realizing this fact we have determined to shift some of the labor to other shoulders, thus increasing the usefulness of the JOURNAL, and at the same time leaving us more time to be devoted to other professional work. We are pleased to announce, therefore, the organization of the North Carolina Medical JOURNAL COMPANY, which has been regularly chartered under the laws of the State. The office of the Company will be located in Charlotte, and Dr. Robert L. Gibbon and Dr. W. H. Wakefield, both of Charlotte, will be associated with the writer in the editorial work of the JOURNAL. Dr. Wakefield will be in entire charge of the business management.

With this division of labor, and the added energy and ability of Drs. Gibbons and Wakefield, the JOURNAL enters upon the new year with a most promising outlook for increased usefulness and prosperity. Marked improvement in its mechanical "get up" will be a prominent feature, while there will be an increased amount of original reading matter. The great flood of medical literature that is published throughout this and other countries will be carefully reviewed, and the meat of the sweetest nuts given our readers—in fact, improvement will mark every department of the JOURNAL.

In closing we wish to extend thanks to our many friends who have been of such signal assistance in carrying out the purpose

of the JOURNAL. Trusting that the JOURNAL, under the new regime will receive the assistance and support of all who value clean, legitimate, dignified journalism, we extend to all our readers a most cordial Christmas greeting with our best wishes for the New Year.

THE TRI-STATE MEDICAL SOCIETY OF NORTH CAROLINA, SOUTH CAROLINA AND VIRGINIA.

In the last issue of the Journal we announced the organization of a Tri-State Medical Society for Virginia and the Carolinas, and stated that the meeting for permanent organization would be held during December in either Charlotte or Raleigh. Since the publication of this announcement we have received a communication from the Secretary, Dr. Paulus A. Irving, of Richmond, Va., informing us that the meeting has been postponed and that Charlotte, North Carolina and January 18, 1899, had been definitely settled upon as the place and time for this meeting. The Central Hotel has given a rate of \$2 a day and will be headquarters of the Society. Dr. E. C. Register, of Charlotte, has been designated as chairman of the Committee of Arrangements, and all who have experienced the warm hospitality of the people and profession of North Carolina's "Queen City" need no assurance from us that they will be accorded a most cordial welcome and will The Southern Railroad and Seabord Air Line enjoy their visit. have psomised reduced rates which will be announced in a circular soon to be issued. The Secretary states that a membership of one hundred and thirteen has already been enrolled, Virginia furnishing 54, North Carolina 42, and South Carolina A number of papers have been promised by prominent members of the profession of the three states and an interesting programme will be presented. Application for membership may be sent to any of the officers of the temporary organization or forwarded to the Association in session at Charlotte, January 18th to 20th, 1899. The Secretary states in his letter that the Tri-State Society cannot, in any sense be considered as antagonistic to the State Societies "for a pre-requisite for membership

in the Tri-State Society will be that the applicant shall be a member in good standing of his respective State Society."

We are much pleased that the organizers of the Tri State Society have decided upon the advisability of such a pre-requisite and are sure that the Society will thus be made stronger and a greater factor for good, as it will receive the hearty endorsement of the representative members of the profession in the three states.

THE HEALTH CONFERENCE.

The Annual Conference of the State Board of Health with the people was held in Winston, December 7th, 1898. We regret that several members of the Board were unavoidably absent, but those who attended presented interesting papers. attendance on the part of the laity was not as large as was desired, but those present took an interest in the proceedings, and manifested a desire to inform themselves upon matters of sanitation. Among those present was Dr. J. J. Kinyoun, of the Marine Hospital Service, who discussed the question of vaccination and presented a paper on the treatment of diphtheria. One of the most striking and useful papers presented was one by Mr. J. L. Ludlow, of Winston, on "Drinking Water in its Relation to Health." Dr. Casper Curtice, Biologist to the A. & M. College, at Raleigh, presented an instructive paper on "Bovine Tuberculosis. Other papers read were—"Management of an Outbreak of Small pox in a North Carolina Community," by Dr. H. F. Long, of Statesville; "Small pox and Vaccination for Plain People," by Col. A. W. Shaffer, of Raleigh; "Baths: a Plea for Their More General Use in the Household," by Dr. S. Westray Battle, of Asheville; "Germs," by Dr. Richard H. Lewis, Secretary of the Board, Raleigh.

Reviews and Book Potices.

A Compend of Obstetrics.—Especially Adapted to the Use of Medical Students and Physicians. By Henry G. Landis, A. M., M. D., Late Professor of Obstetrics and Diseases of Women in Starling Medical College. Revised and edited by William H. Wells. M. D., Adjunct Professor

of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic; Instructor in Obstetrics in Jefferson Medical College, Philadelphia. etc., etc. Sixth edition, illustrated. Price, 80c. P. Blakiston's Son & Co., Philadelphia. 1898-

This is one of the popular "quiz compends" published by Messrs. P. Blakiston's Son & Co. The rapidity with which successive editions are exhausted, gives opportunity for revision of the text and keeping the compend up to date. It makes a good means for a quick review of the subject.

Manual of Skin Diseases.—With Special Reference to Diagnosis and Treatment. For the use of Students and General Practitioners. By W. A. Hardaway, M. D., Professor of Diseases of the Skin in the Missouri Medical College, St. Louis. Second edition, entirely rewritten and much enlarged. In one handsome 12mo. volume of 560 pages, with 40 engravings and 2 colored plates. Cloth, \$2.25, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

The general practitioner needs a practical work on diseases of the skin-he wants something more than a compend-he does not care nor does he have the time to wade through the pages of an extensive work intended for the use of specialists in this branch—he wants something more complete and full than the former and more practical than the latter. In Dr. Hardaway's work he will find it. In this edition the author has arranged the various diseases under an orderly system of classification and not alphabetically, as in the former edition. A number of illustrations have been added and the subject matter increased. while the price of the volume has been reduced. Chief attention has been devoted to diagnosis and treatment, and conciseness and clearness of expression are conspicuous characteristics of the work. The appendix of formula has been omitted as unnecessary in view of the fact that dietary, hygienic and medical treatment are fully considered in the text.

A Pocket Medical Dictionary, Giving the Pronunciation and Definition of the Principal words Used in Medicine and the collateral sciences, Including very complete tables. By George M. Gould, A. M., M. D., author of "The Illustrated Medical Dictionary, "The Student's Medical Dictionary; Editor of "The Philadelphia Medical Journal," etc. A new edition, entirely rewritten and enlarged, including over 21,000 words. P. Blakiston's Son & Co., Philadelphia. 1898.

We welcome the new edition of this justly popular dictionary with much pleasure, for the former edition has become the worse from wear, it being the first authority to which we turn when we encounter one of the numerous unpronounceable words that specialists so love to use now a days. And we generally find what we are looking for in its pages. The former edition contained 12,000 words and without increasing the size uncomfortably the number has been increased in the present edition to 21,000 words pronounced and defined.

Several features of this book call for special attention:

- I. The simple and practical system of pronunciation.
- II. The large percentage (about 75%) of words specially pronounced.
 - III. The concise definitions
- IV. The omission of rare and obsolete words out of place and useless in a book of this character. It would have been easy to add 5,000 such words.
- V. The many valuable tables especially that of Clinical Eponymic Terms, a novelty that in itself is worth the one dollar asked for the book.
- VI. The style in which the book is made, the types, shape, printing and binding.
- VII. The size of the book. By the use of specially made thin paper, narrow margins, the exclusion of rare and obsolete words, etc., the bulk has been so reduced as to be properly called a pocket dictionary,—"infinite riches in little room."

Review of Current Literature.

OBSTETRICS.

IN CHARGE OF

GEO. GILLETT THOMAS, M. D.,

R. L. PAYNE, M. D.

CRIMINAL ABORTION.—Dr. Wm. Haggard in an excellent paper on Abortion read before the Nashville Academy of Medicine (Gaillard's Med. Jour.) in speaking of criminal abortion, says:

When we consider its great prevalence, its alarming and steady increase in all grades of society, its hurtful influence on health, happiness and morality, and the deleterious effect upon posterity, this becomes a matter of the most insistent importance. It has been asserted that more lives are annually sacrificed by the unnecessary and intentional dis-

truction of the human fetus than are saved by quarantine, drainage, sewerage, vaccination and antiseptics combined!

The "Report of the Special Committee on Criminal Abortions," appointed by the Michigan State Board of Health, calculates. as the result of its investigations, seventeen abortions come to the knowledge of the profession to every 100 pregnancies. Estimating as many more that do not come to light they compute 34 per cent., or one-third of all cases ending in miscarriage. They further report that in the United States fully 100,000 criminal abortions occur annually, and over 6,000 women die from the immediate effects. This pernicious practice has been the curse of all times, and one of the most potent agencies in the fall of many civilizations. It is fearful to think of the countless millions of unborn human beings who have thus been slaughtered-many of whom might have been of priceless benefit to society. Much of this wholesale and cowardly murder of innocent and unprotected children has been done viciously, but more has been done ignorantly through misconception of the nature of the crime and recklessly through misinformation about its deleterious and multitudinous consequences.

The uncertainty of the law relative to the heinousness of the crime as regards an arbitrary period of quickening, and the convenient or actual ignorance of the mother of the fact that "life" exists the moment conception occurs, and to destroy the spark is as actually and truly murder as to brain, or strangle the babe after it is born into the world.

It has been said that from 75 to 90 per cent. of criminal abortions occur in married women. Yet she has infinitely less justification than the deceived, forsaken and frenzied girl who risks any hazard to get rid of the evidence of her shame! Many good and exemplary women do not believe they are doing wrong to have an abortion procured before quickening. They are prompted to this from motives of ease, distaste for maternity, the specious plea of having already enough children, inability to care for and educate them. They are further actuated to this unnatural crime by the flagrant and flamboyant advertisements of abortion nostrums in the secular and I regret to say, religious press, which are vaunted to "correct all suppressions of the menstrual function." They contain explicit directions to pregnant women to be sure to carefully abstain from their use on account of their certainty to produce abortion, and deluded and disappointed in the efficacy of the vaunted remedies the desperate girl or demon-possessed woman is spurred on to greater wrong. Here is the harvest of the bloody-handed abortionist. He is here in our midst. We all know him. Abortionists are ubiquitous in every town and village, infesting every city, and holding membership in many medical societies. They are daily plotting with unfortunate and unwomanly women for the brutal and unjustifiable murder of their unborn babes, but never a one was hung and scarcely a one convicted. They are, however, not the only ones appealed to. A writer in the Medico-Legal Journal says: "Every man who undertakes the practice of medicine is met upon the threshold of his career by one of the most powerful, baneful, damning combinations of temptation that can possibly assail the human heart. All that is good, all that is evil within him, is subjected to the utmost pressure that can be brought to bear by the combined influences of pity, sympathy, and sometimes greed. Youth and beauty on bended knee, with clasped hands and streaming eyes, implores him with more devoted earnestness of purpose, with more burning reality of feeling than that with which it approaches the throne of grace."

This is, indeed, a stirring and saddening experience. No self-respecting man, with the courage to do his simple duty and the rectitude to decline to do murder, can dare to swerve from what he knows to be right. "I will give no deadly medicine to any one if asked, nor suggest any such course, nor will I conspire with a woman to destroy her unborn child." declares our Hippocratic oath. But I conceive we can be of immense assistance to the poor unfortunates who thus apply to us. We can save many half-crazed young women from taking this desperate step by a vigorous recital of its perils, and an appeal to her love of self-protection to find some other way out of the dilemma. One end of the horn may be the muzzle of a shotgun and the other lying-in retreat. We can peremptorily dissuade a misguided married woman who prays for relief of her burden, because she cannot afford another child, by asking her why she does not implore us to kill one of her other children instead of the innocent babe in the womb, and by telling her the crime is equally as great and would be much safer for her own life and health.

This subject has always been one of vast solicitude to the profession. When the American Medical Association met in this city in 1857, a strong committee was appointed to report upon criminal abortion with a view to its general suppression. Later the association published a prize essay by H. R. Storer, of Boston, entitled "Why Not? or a Book for Every Woman," in which the wickedness of the crime was set forth and condemned, and its harmful effect and dangers explained. This did great good, but we need another Moses to lead us out of the wilderness of crime.

The cause of humanity is somewhat protected by the fact that any man who will commit an abortion cannot, as a rule, do it with safety. Out of 116 cases of criminal abortion, collected by Tardieu in Paris, 60 died outright and many had a lingering convalescence If there were no other functious for a Bureau of Public Health in this country than the stamping out of the criminal abortionist, the increased population and future prosperity of the United States would amply justify its

creation. We have a Bureau of Animal Industry for the prevention of diseases among cattle and the detection of trichinosis in pork, yet there is not a law that is operative in the prevention of the wanton and wholesale slaughter of these human beings. Our nation has just concluded a relentless war at an enormos expenditure of money and the cost of many valuable lives to avenge the murder of 256 sailors. The tremendous daily output of abortion-mongers outnumber many times over the unfortunate victims in the Maine disaster, and yet there is not a voice of official protestation raised at this unholy warfare.

ACETANILID AS A PREVENTIVE OF PREMATURE EXPULSION OF THE OVUM.—Harnsberger (Journal of the American Medical Association, Oct. 22, 1898) believes that interrupted pregnancy is not, as a rule, due to single causes, but is the result of a combination of several, the underlying condition being a systemic or nervous depreciation brought on by the early operation of over-strained or other sinister influences incident to modern times and modern modes of living. By directing proper attention to the predisposing first cause, the tendency to abortions and premature labors can be notably limited. With women in whom the existence of pregnancy is uncertain but strongly suggestive during the first two months, it is desirable that the uterus should be assisted in retaining the products of conception if present. We frequently see women who are usually regular pass over a catamenial period. Their suspicions may be aroused, but at the appearance very soon thereafter of the menstrual flux, though it should be accompanied by an increased discharge and more pain, it is looked upon as only a delayed period, they being unaware that one of the clots which has been expelled contained the immature ovum. In such instances, as well as in habitual abortion, the author advocates the exhibition of five to eight grains of acetanilid, repeated in one, two or four hours as necessary. In cases of ovarian irritation, where there seems to be a tendency to separation of the ovum at what would have been a menstrual period, the more or less regular use of viburnum prunifolium and potassium bromide, with acetanilid at the time of each periodic disturbance, is recommended. In emergency cases acetanilid 10 to 15 grains, repeated at short intervals, should be given. For those who are not accustomed to this drug it would be well to begin with 5 to 71/2 grains, but in every instance individual susceptibility should be considered.

Harnsberger has employed acetanilid in the manner indicated for several years, and has never seen alarming or even objectionable symptoms arise—such as nausea, vomiting, collapse, or cardiac depression—or cumulative action following its use. It does infrequently give rise to a rather profuse perspiration, but this in no way interferes with the successful progress of the case. Contrary to the observations of Dulacska and others, he finds that the action of the drug on the vascular system does not tend to induce dangerous hemorrhage.—Med. Age.

PEDIATRICS.

IN CHARGE OF

J. W. P. SMITHWICK, M. D., LAGRANGE, N. C.

INFANTILE HYSTERIA. - (Ferrin Arcb. de Neurologie.) Eighteen cases are reported in children from one to fourteen years of age, eight being under four years. Boys and girls were affected with equal frequency. The hysteria of infants is as frequent as the hysteria of adults, and it is of the same varieties, simulating disease of the medulla, of the cerebrum, or of any other viscus. Among the reported cases five gave the clinical picture of meningitis; four showed organic paralyses and contractures, one had toxic paralysis, two had polyuria and polydipsia as in true diabetes, and one simulated coxalgia. In addition, hysteria may be associated with other neuroses and organic diseases, making the diagnosis more difficult. Thus a rythmic chorea accompanied an atrophic infantile hemiplegia in one case, and in another hysteria coexisted with presistent mental degeneration; Pott's disease and hysteria also occurred in the one patient. The diagnosis is always difficult in children, and must be made with the greatest reserve and care in the light of family history and the symptoms. The prognosis is usually accounted good, and the symptoms are certainly less tenacious of correction than in adult life, but they recur with remarkable facility in the same or different forms. Consequently the future of any child with marked hysteria must be very gravely considered. As etiological factors we have to consider the predisposing causes of a neurotic or alcoholic heredity, and the exciting causes of trauma and strong emotions-fanatical, religion, superstition, fear, etc.

In regard to treatment, prophylaxis must consist in the avoidance of over-stimulation, both emotional and intellectual, in children who have an hysterical predisposition. As for the disease itself, drugs are absolutely valueless, except iron, in anæmic cases. It is by appealing to the child's intelligence to understand and carry out an order, and by convincing him that he is going to get well, that the greatest success is obtained. As for the use of hypnotism, valuable as it is in the hysteria of adults, it must be used with extreme care, if at all, in these susceptible children, and in early infancy can hardly be of use at all.—Archives of Pediatrics.

GENERAL SURGERY.

IN CHARGE OF

H. T. BAHNSON, M. D.,

R. L. GIBBON, M. D.,

). Howell Way, M. D.

OPERATION FOR REMOVAL OF ENCY STED GALL STONES OF LIVER. CONDITION ACCOMPANIED BY TOTAL OBLITERATION OF GALL BLAD-DER.—(Dr. F. F. Knorp, Pacific Med. Jour.) The history of this case is as follows:-Mrs. C. L., age 32 years, married, native of Prince Edward's Island, Canada. Patient was perfectly well up to five years ago, when she first was attacked with severe pain in right hypochondrisc region accompanied by vomiting, and lasting one hour, after which she was well as ever for a year when she was attacked in same way, this time soreness following the pain and lasting a week. Attack was repeated in another year, this time coming on one month after confinement. This was followed by a similar attack in another year's time. Last June she had another attack but this one was accompanied by jaundice which lasted five weeks, and then entirely disappeared but only for twelve days when both pain and jaundice again returned. At this stage the patient came under my observation, and was suffering with excruciating pain in right hypochondriac region, jaundice, vomiting, temperature 105 deg. clay colored stools, etc. The stools were carefully strained but no stone found. The liver was found slightly enlarged, tender on pressure, and opposite the tenth costal cartilage at margin of right rectus a hard lump the size of a walnut was distinctly palpable, which appeared to be immediately under the skin.

Diagnosis was made of biliary calculi plus extravasated gall, and operation advised. Assisted by Dr. T. E. Bailly I performed the operation on August 31st last and found eight stones encysted in right lobe of liver, at a point corresponding with the vesical fossa. The gall bladder was entirely obliterated, no portion of it being found in the vesical fossa where it should be. The stones were removed, and after carefully searching the common duct and surrounding region for more stones and failing to find any, the cavity left in the liver was stitched to peritoneum, muscular tissue and skin, leaving a perfect drainage.

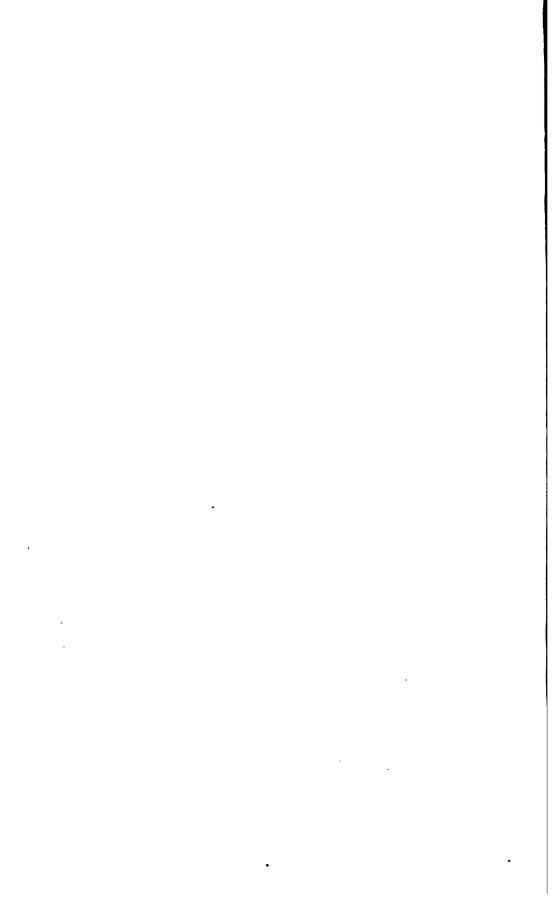
Recovery was uninterrupted, with the exception of a slight return of pain and jaundice on one occasion and then only lasting for a day. From that time on patient has been free from all symptoms. This case is not reported from an operative standpoint, but for the rarity and peculiarity of the case. My solution is that the stones were originally in the gall bladder, setting up an adhesive inflammation of the anterior bladder wall to liver, a subsequent ulceration and the passage of stones

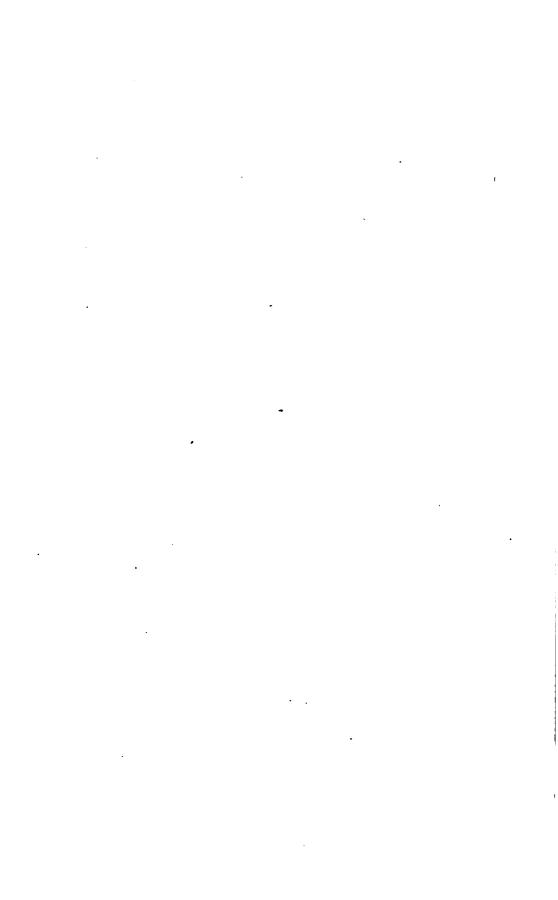
into parenchyma of liver, the posterior bladder wall now falling against and becoming adherent, acting as one of the liver coverings at this point, the whole process being so completely and neatly done as to erase all trace of the gall bladder.

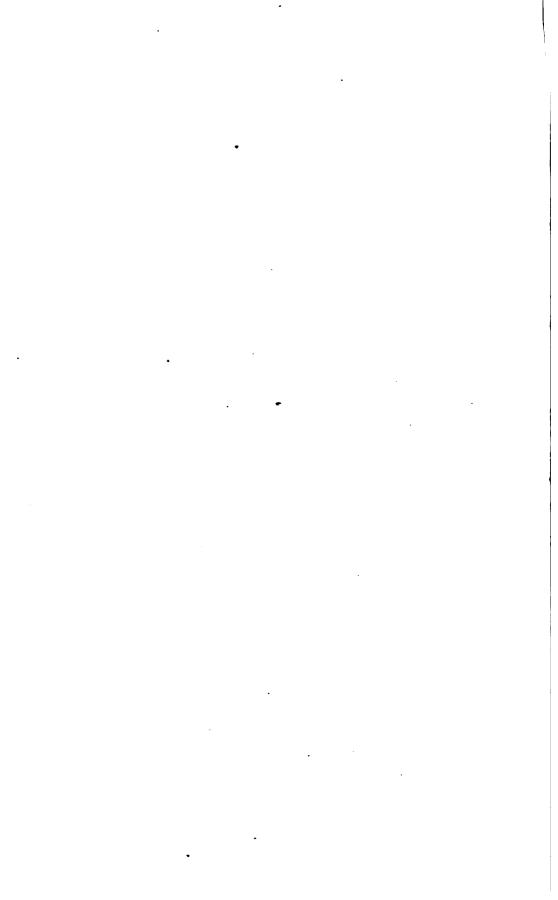
Therapeutic Bints.

How to Apply Plaster of Paris. - Dr. Lester Keller, (Med. Council) says the greatest objections are that it will not set quick, and that it will crumble. Let us prepare bandages. We want some cheese cloth, fresh plaster, a pepper-box with large perforations, full of pulverized alum, and a smooth board about 10 inches wide and 3 feet long. Tear your cloth three times as wide as you want your bandages and from 4 feet to 9 feet long. Spread it out on the board, and as the assistant pours on the dry plaster rub it in well with the hands so as to fill up the meshes of the cloth. Have a little alum dusted on, fold the cloth on itself, so as to make three thicknesses, roll up very losely. Treat the entire roll that way, and remember a little excess of plaster is a very good thing. When we are ready to put on the dressing we want plenty of rolls so prepared, two bowls of warm water, a piece of oil cloth to put under the dish, a large sugar shaker full of dry plaster, a big apron, and an assistant.

Put one of the rolls in the water, and after it has become wet through, give it a gentle squeeze and apply it to the limb. After it is on, dust on some dry plaster from the sugar-shaker, dip your hands in the water and rub them over the outside of the bandage. Apply rolls as long as necessary to get the bandage heavy enough, and then give it a good coat of plaster on the outside. Your assistant will keep busy keeping the bandage wet (only one should be wet at a time), dusting on the plaster, and occasionally giving a dash of alum. Keep your hands wet rubbing them over the surface of the dressing. Make your strips of cloth short so that the inside of the roll will not set before you get it all on. Work your plaster wet and it will not crumble. Put in the alum to make it set quickly. Above all, work—quickly.













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